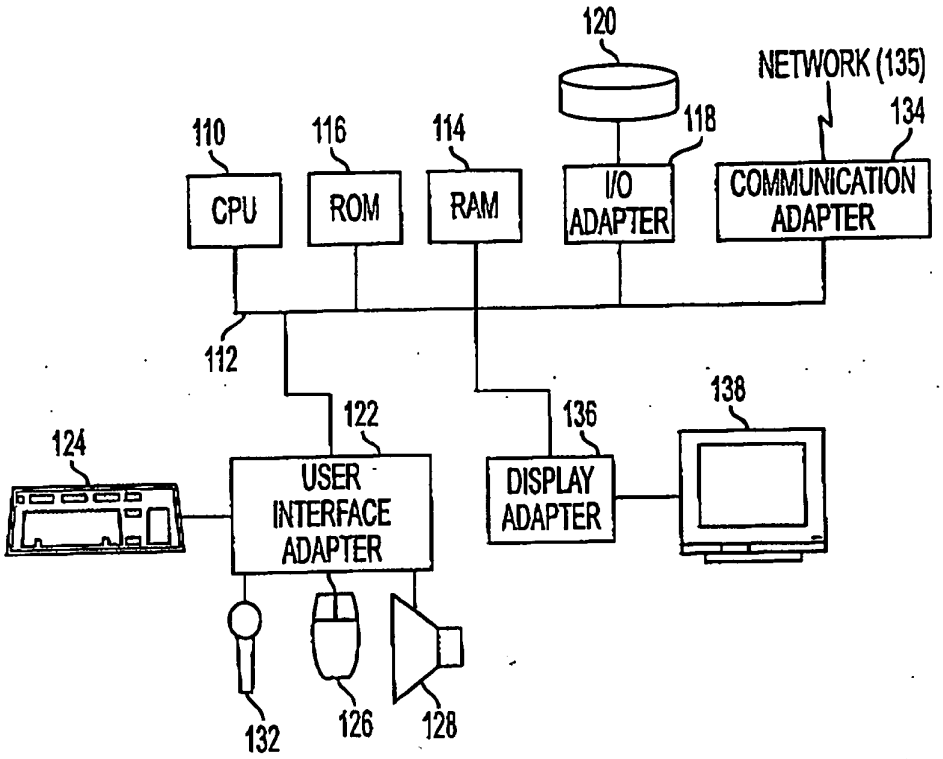
120
NETWORK (135)
110
116
114
118
134
CPU
ROM
RAM
I/O ADAPTER
COMMUNICATION ADAPTER
112
122
136
138
124
USER INTERFACE ADAPTER
DISPLAY ADAPTER
132
126
128

FIG. 1

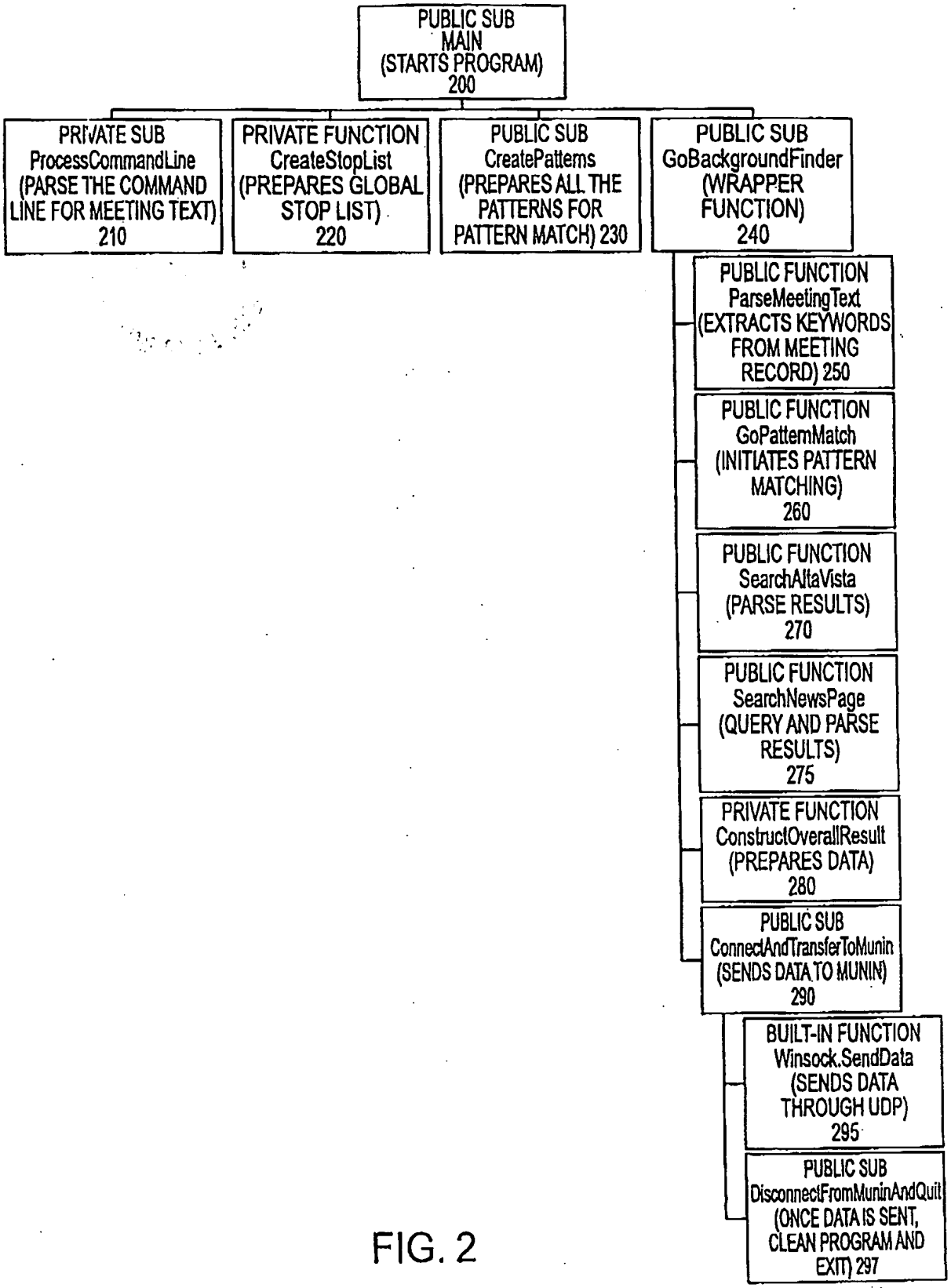
PUBLIC SUB
MAIN
(STARTS PROGRAM)
200
PRIVATE SUB
ProcessCommandLine
(PARSE THE COMMAND
LINE FOR MEETING TEXT)
210
PRIVATE FUNCTION
CreateStopList
(PREPARES GLOBAL
STOP LIST)
220
PUBLIC SUB
CreatePatterns
(PREPARES ALL THE
PATTERNS FOR
PATTERN MATCH) 230
PUBLIC SUB
GoBackgroundFinder
(WRAPPER
FUNCTION)
240
PUBLIC FUNCTION
ParseMeetingText
(EXTRACTS KEYWORDS
FROM MEETING
RECORD) 250
PUBLIC FUNCTION
GoPattemMatch
(INITIATES PATTERN
MATCHING)
260
PUBLIC FUNCTION
SearchAltaVista
(PARSE RESULTS)
270
PUBLIC FUNCTION
SearchNewsPage
(QUERY AND PARSE
RESULTS)
275
PRIVATE FUNCTION
ConstructOverallResult
(PREPARES DATA)
280
PUBLIC SUB
ConnectAndTransferToMunin
(SENDS DATA TO MUNIN)
290
BUILT-IN FUNCTION
Winsock.SendData
(SENDS DATA
THROUGH UDP)
295
PUBLIC SUB
DisconnectFromMuninAndQuit
(ONCE DATA IS SENT,
CLEAN PROGRAM AND
EXIT) 297

FIG. 2

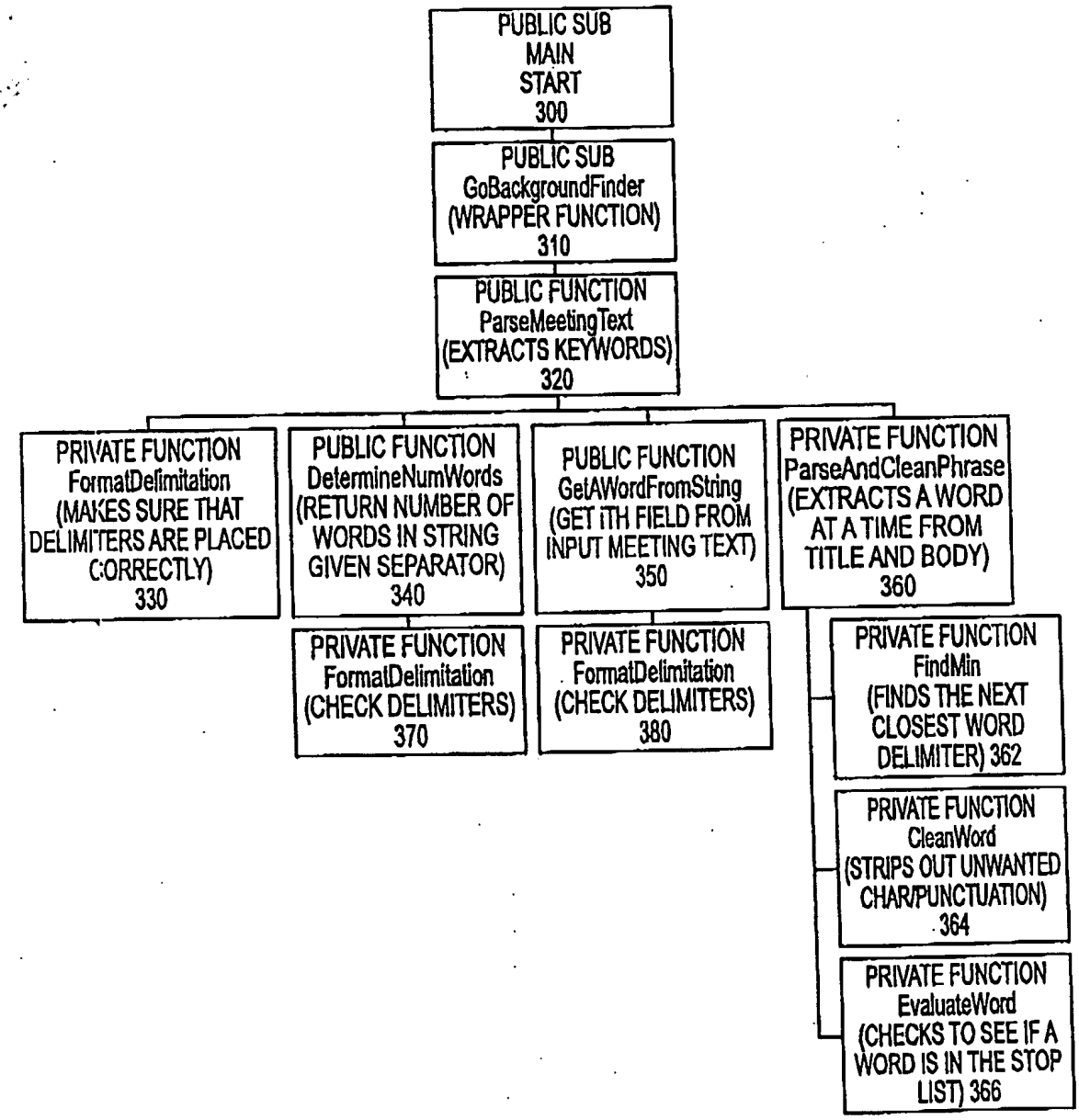
PUBLIC SUB
MAIN
START
300
PUBLIC SUB
GoBackgroundFinder
(WRAPPER FUNCTION)
310
PUBLIC FUNCTION
ParseMeetingText
(EXTRACTS KEYWORDS)
320
PRIVATE FUNCTION
FormatDelimitation
(MAKES SURE THAT
DELIMITERS ARE PLACED
CORRECTLY)
330
PUBLIC FUNCTION
DetermineNumWords
(RETURN NUMBER OF
WORDS IN STRING
GIVEN SEPARATOR)
340
PRIVATE FUNCTION
FormatDelimitation
(CHECK DELIMITERS)
370
PUBLIC FUNCTION
GetAWordFromString
(GET iTH FIELD FROM
INPUT MEETING TEXT)
350
PRIVATE FUNCTION
FormatDelimitation
(CHECK DELIMITERS)
380
PRIVATE FUNCTION
ParseAndCleanPhrase
(EXTRACTS A WORD
AT A TIME FROM
TITLE AND BODY)
360
PRIVATE FUNCTION
FindMin
(FINDS THE NEXT
CLOSEST WORD
DELIMITER) 362
PRIVATE FUNCTION
CleanWord
(STRIPS OUT UNWANTED
CHAR/PUNCTUATION)
364
PRIVATE FUNCTION
EvaluateWord
(CHECKS TO SEE IF A
WORD IS IN THE STOP
LIST) 366

FIG. 3

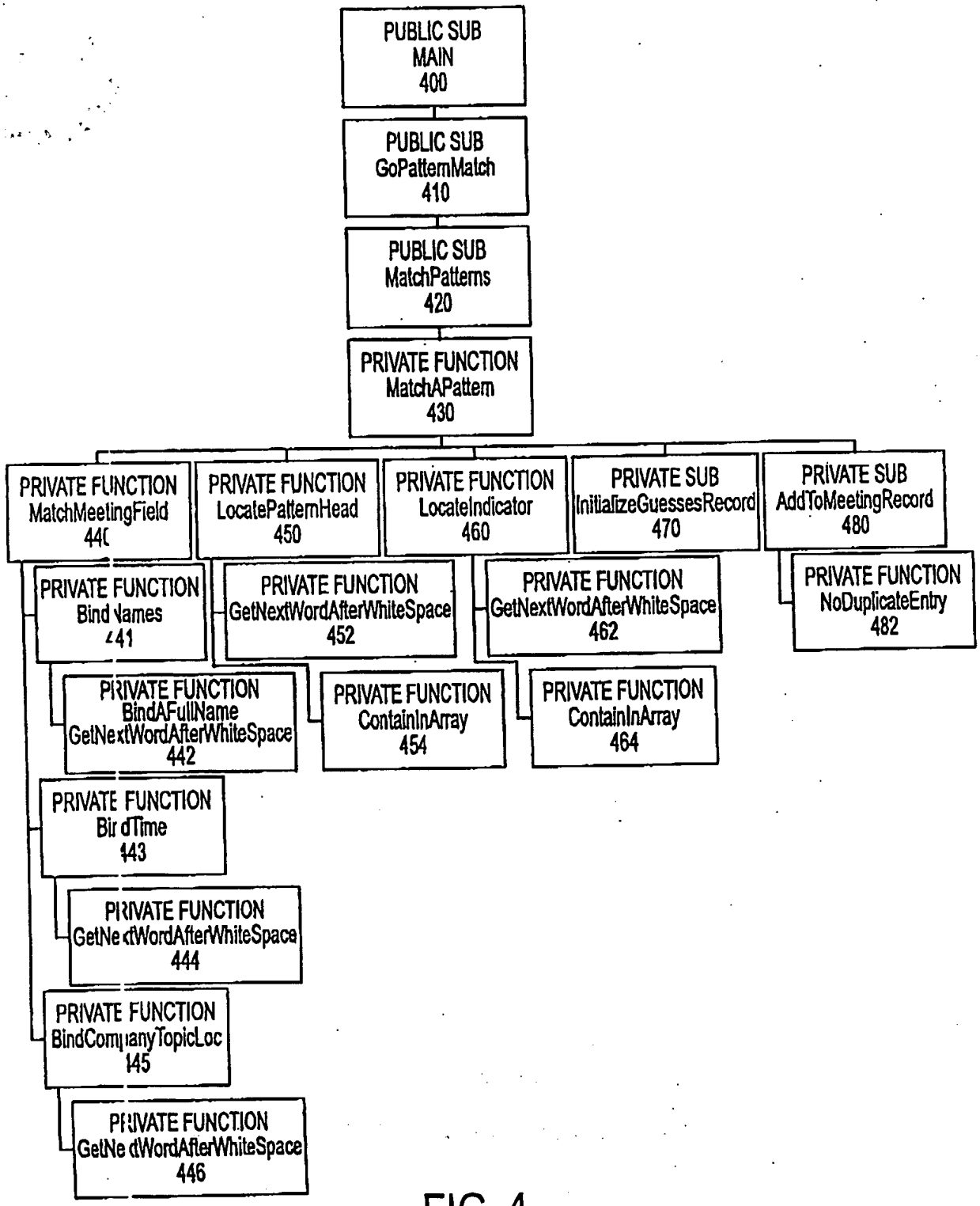
PUBLIC SUB
MAIN
400
PUBLIC SUB
GoPatternMatch
410
PUBLIC SUB
MatchPatterns
420
PRIVATE FUNCTION
MatchAPattern
430
PRIVATE FUNCTION
MatchMeetingField
440
PRIVATE FUNCTION
LocatePatternHead
450
PRIVATE FUNCTION
LocateIndicator
460
PRIVATE SUB
InitializeGuessesRecord
470
PRIVATE SUB
AddToMeetingRecord
480
PRIVATE FUNCTION
BindNames
441
PRIVATE FUNCTION
GetNextWordAfterWhiteSpace
452
PRIVATE FUNCTION
GetNextWordAfterWhiteSpace
462
PRIVATE FUNCTION
NoDuplicateEntry
482
PRIVATE FUNCTION
BindAFullName
GetNextWordAfterWhiteSpace
442
PRIVATE FUNCTION
ContainInArray
454
PRIVATE FUNCTION
ContainInArray
464
PRIVATE FUNCTION
BindTime
443
PRIVATE FUNCTION
GetNextWordAfterWhiteSpace
444
PRIVATE FUNCTION
BindCompanyTopicLoc
445
PRIVATE FUNCTION
GetNextWordAfterWhiteSpace
446

FIG. 4

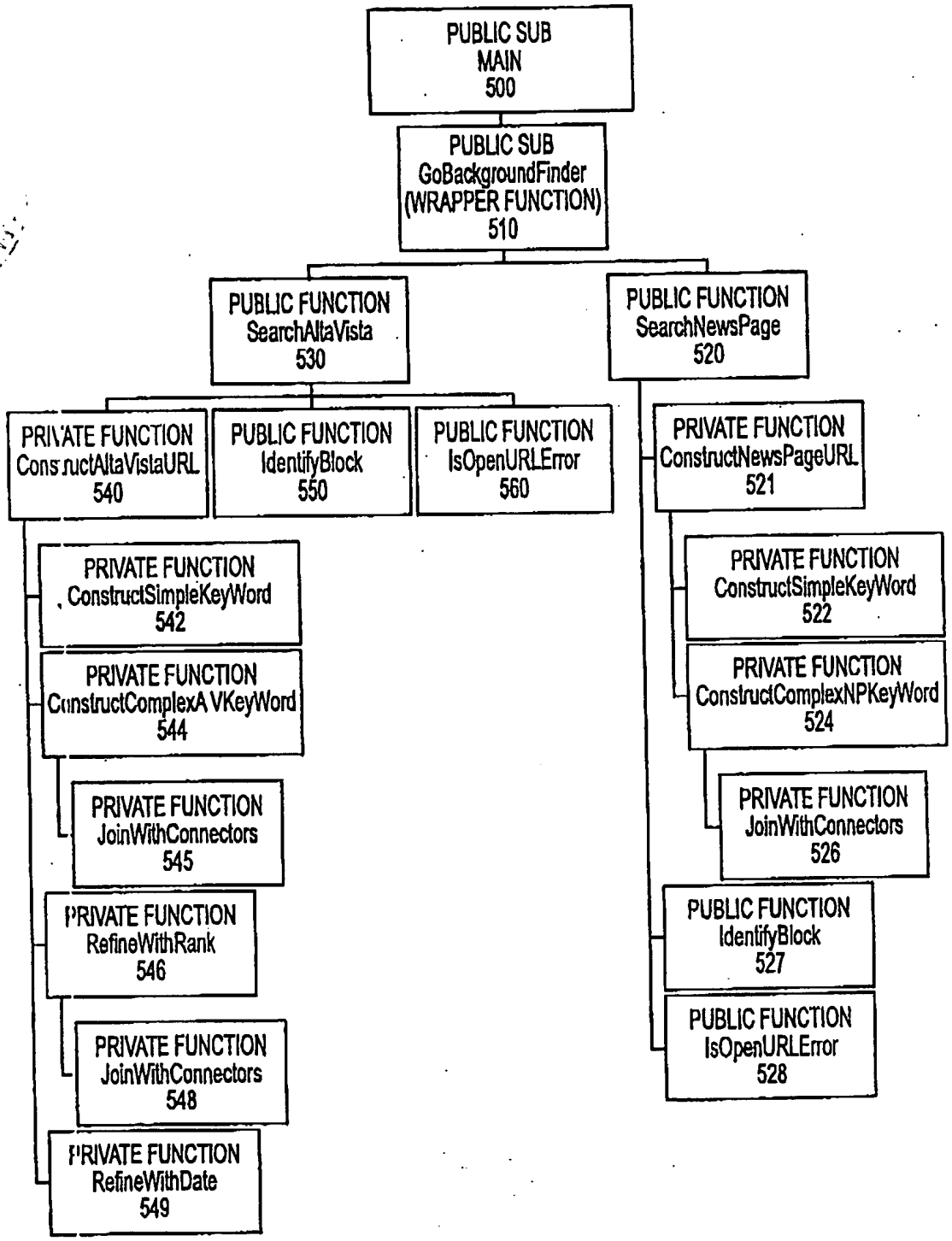
PUBLIC SUB
MAIN
500
PUBLIC SUB
GoBackgroundFinder
(WRAPPER FUNCTION)
510
PUBLIC FUNCTION
SearchAltaVista
530
PUBLIC FUNCTION
SearchNewsPage
520
PRIVATE FUNCTION
ConstructAltaVistaURL
540
PUBLIC FUNCTION
IdentifyBlock
550
PUBLIC FUNCTION
IsOpenURLError
560
PRIVATE FUNCTION
ConstructNewsPageURL
521
PRIVATE FUNCTION
ConstructSimpleKeyWord
542
PRIVATE FUNCTION
ConstructComplexAVKeyWord
544
PRIVATE FUNCTION
JoinWithConnectors
545
PRIVATE FUNCTION
RefineWithRank
546
PRIVATE FUNCTION
JoinWithConnectors
548
PRIVATE FUNCTION
RefineWithDate
549
PRIVATE FUNCTION
ConstructSimpleKeyWord
522
PRIVATE FUNCTION
ConstructComplexNPKeyWord
524
PRIVATE FUNCTION
JoinWithConnectors
526
PUBLIC FUNCTION
IdentifyBlock
527
PUBLIC FUNCTION
IsOpenURLError
528

FIG. 5

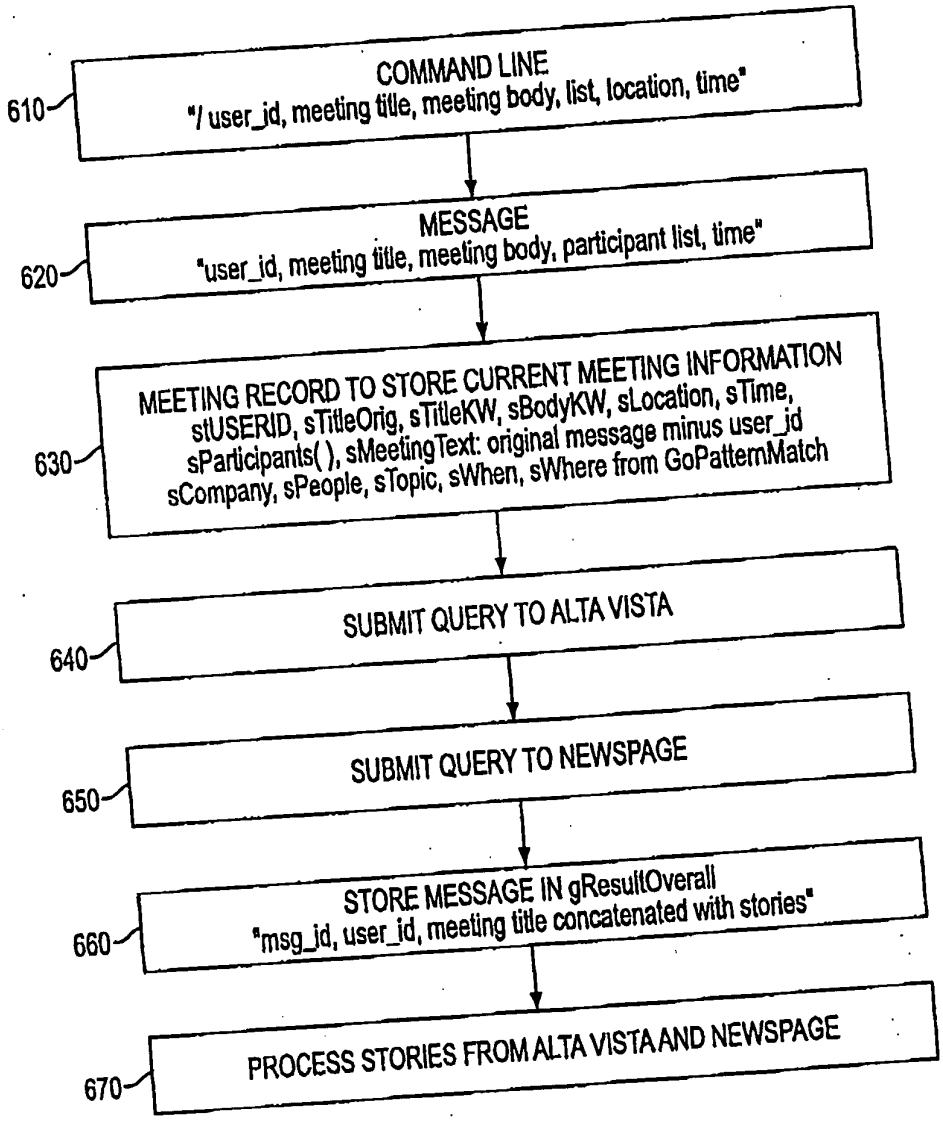
610
COMMAND LINE
"/ user_id, meeting title, meeting body, list, location, time"
620
MESSAGE
"user_id, meeting title, meeting body, participant list, time"
630
MEETING RECORD TO STORE CURRENT MEETING INFORMATION
stUSERID, sTitleOrig, sTitleKW, sBodyKW, sLocation, sTime,
sParticipants( ), sMeetingText: original message minus user_id
sCompany, sPeople, sTopic, sWhen, sWhere from GoPatternMatch
640
SUBMIT QUERY TO ALTA VISTA
650
SUBMIT QUERY TO NEWSPAGE
660
STORE MESSAGE IN gResultOverall
"msg_id, user_id, meeting title concatenated with stories"
670
PROCESS STORIES FROM ALTA VISTA AND NEWSPAGE

FIG. 6

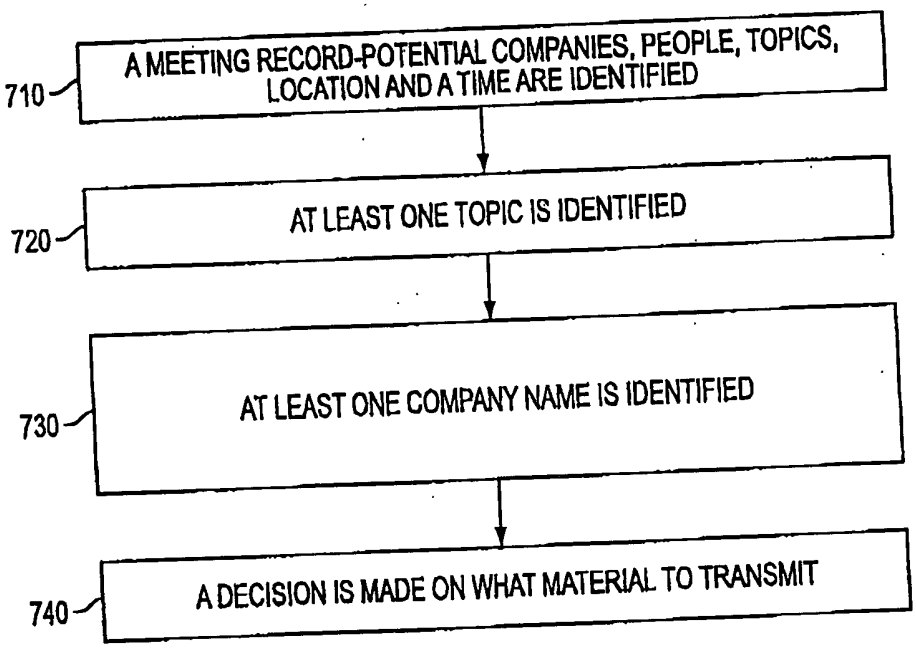
A MEETING RECORD-POTENTIAL COMPANIES, PEOPLE, TOPICS, LOCATION AND A TIME ARE IDENTIFIED
710
AT LEAST ONE TOPIC IS IDENTIFIED
720
AT LEAST ONE COMPANY NAME IS IDENTIFIED
730
A DECISION IS MADE ON WHAT MATERIAL TO TRANSMIT
740

FIG. 7

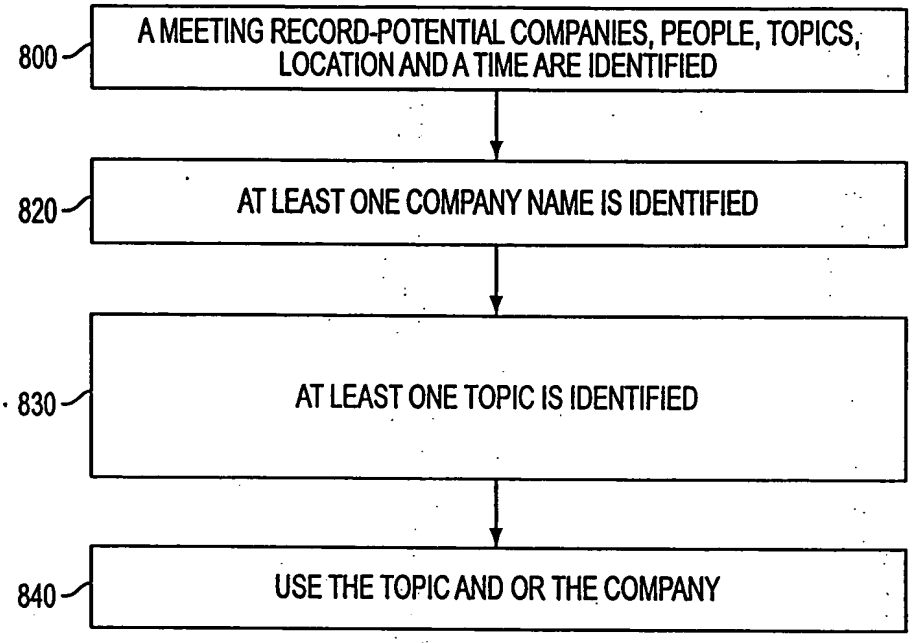
800
A MEETING RECORD-POTENTIAL COMPANIES, PEOPLE, TOPICS, LOCATION AND A TIME ARE IDENTIFIED
820
AT LEAST ONE COMPANY NAME IS IDENTIFIED
830
AT LEAST ONE TOPIC IS IDENTIFIED
840
USE THE TOPIC AND OR THE COMPANY

FIG. 8

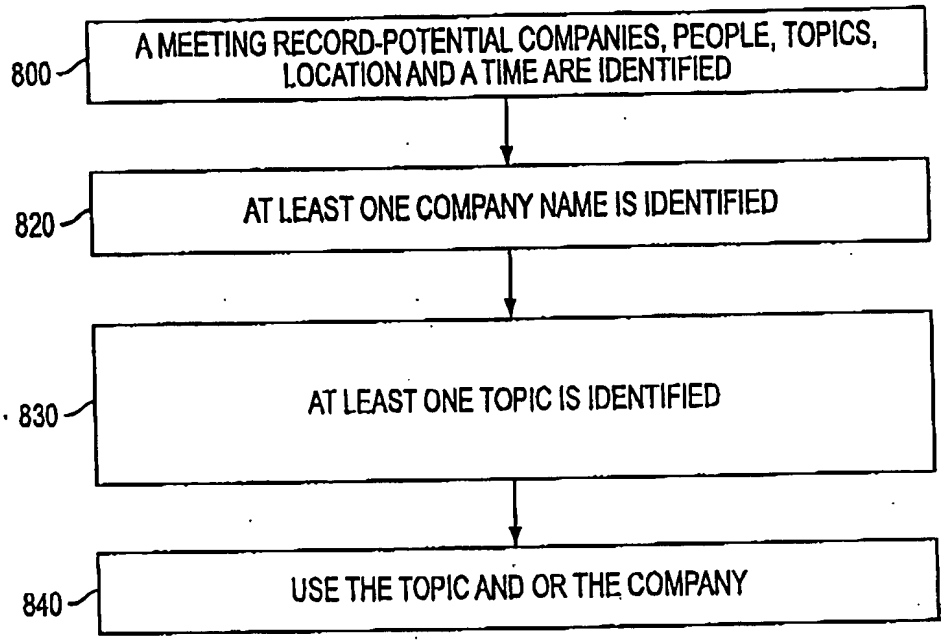
800
A MEETING RECORD-POTENTIAL COMPANIES, PEOPLE, TOPICS, LOCATION AND A TIME ARE IDENTIFIED
820
AT LEAST ONE COMPANY NAME IS IDENTIFIED
830
AT LEAST ONE TOPIC IS IDENTIFIED
840
USE THE TOPIC AND OR THE COMPANY

FIG. 8

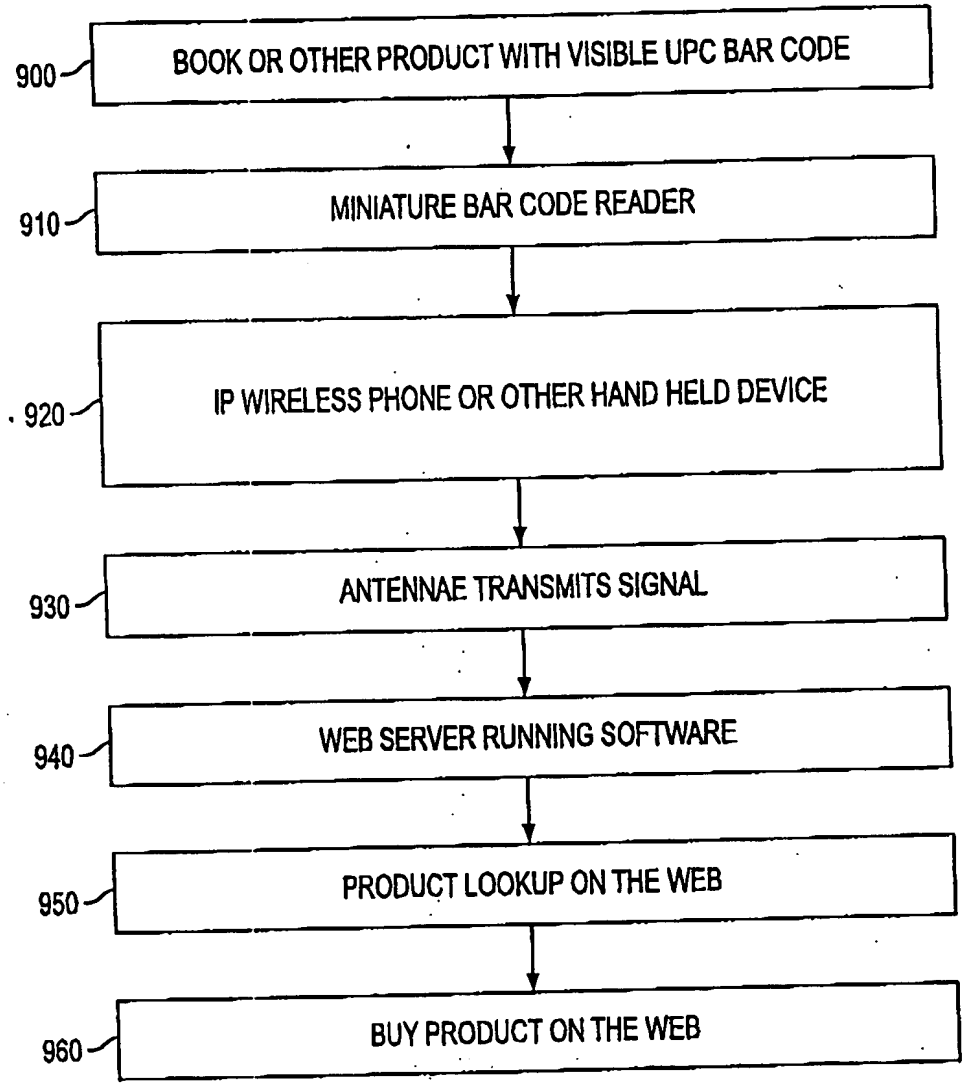
900
BOOK OR OTHER PRODUCT WITH VISIBLE UPC BAR CODE
910
MINIATURE BAR CODE READER
920
IP WIRELESS PHONE OR OTHER HAND HELD DEVICE
930
ANTENNAE TRANSMITS SIGNAL
940
WEB SERVER RUNNING SOFTWARE
950
PRODUCT LOOKUP ON THE WEB
960
BUY PRODUCT ON THE WEB

FIG. 9

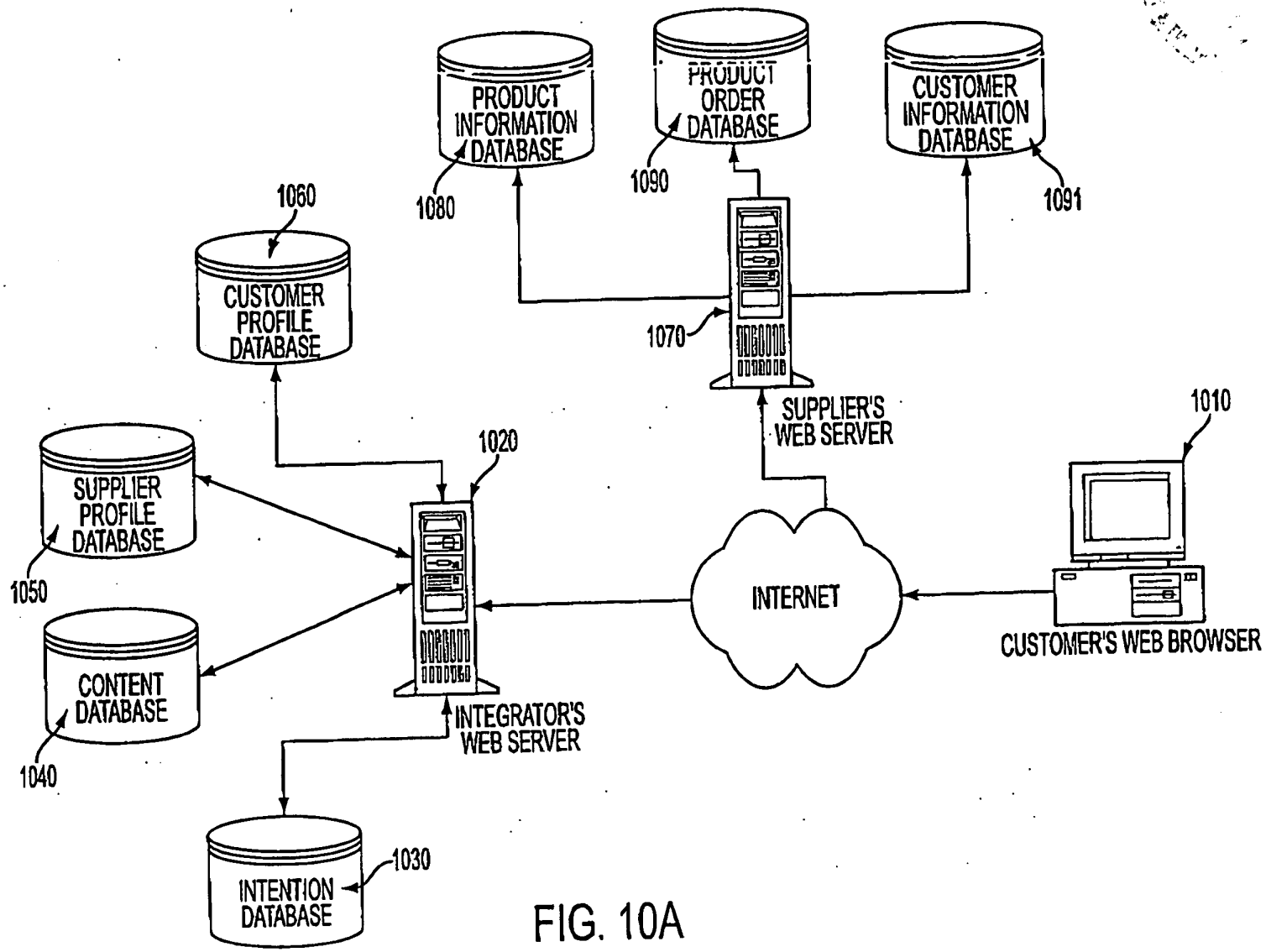
PRODUCT INFORMATION DATABASE
1080
PRODUCT ORDER DATABASE
1090
CUSTOMER INFORMATION DATABASE
1091
1060
CUSTOMER PROFILE DATABASE
1070
SUPPLIER'S WEB SERVER
1010
1020
SUPPLIER PROFILE DATABASE
1050
INTERNET
CUSTOMER'S WEB BROWSER
CONTENT DATABASE
1040
INTEGRATOR'S WEB SERVER
INTENTION DATABASE
1030

FIG. 10A

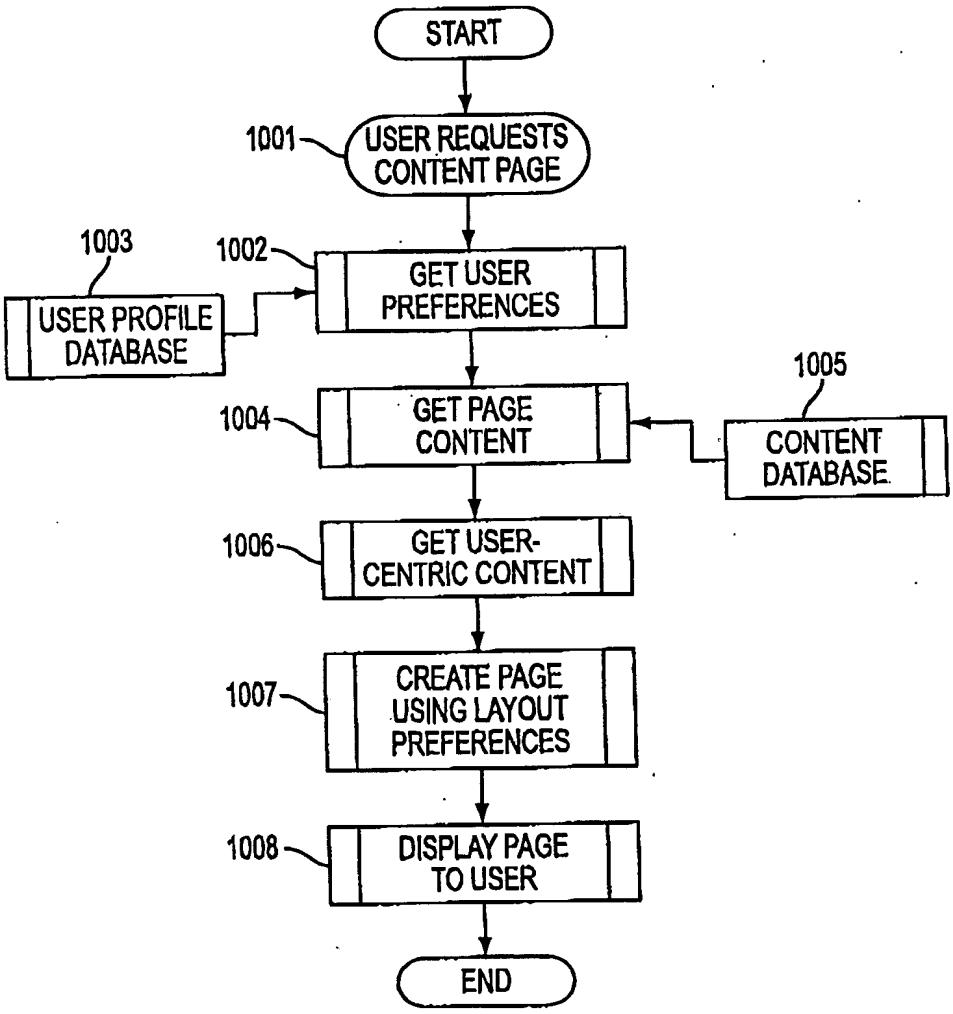
START
1001
USER REQUESTS CONTENT PAGE
1003
1002
GET USER PREFERENCES
USER PROFILE DATABASE
1005
1004
GET PAGE CONTENT
CONTENT DATABASE
1006
GET USER-CENTRIC CONTENT
1007
CREATE PAGE USING LAYOUT PREFERENCES
1008
DISPLAY PAGE TO USER
END

FIG. 10B

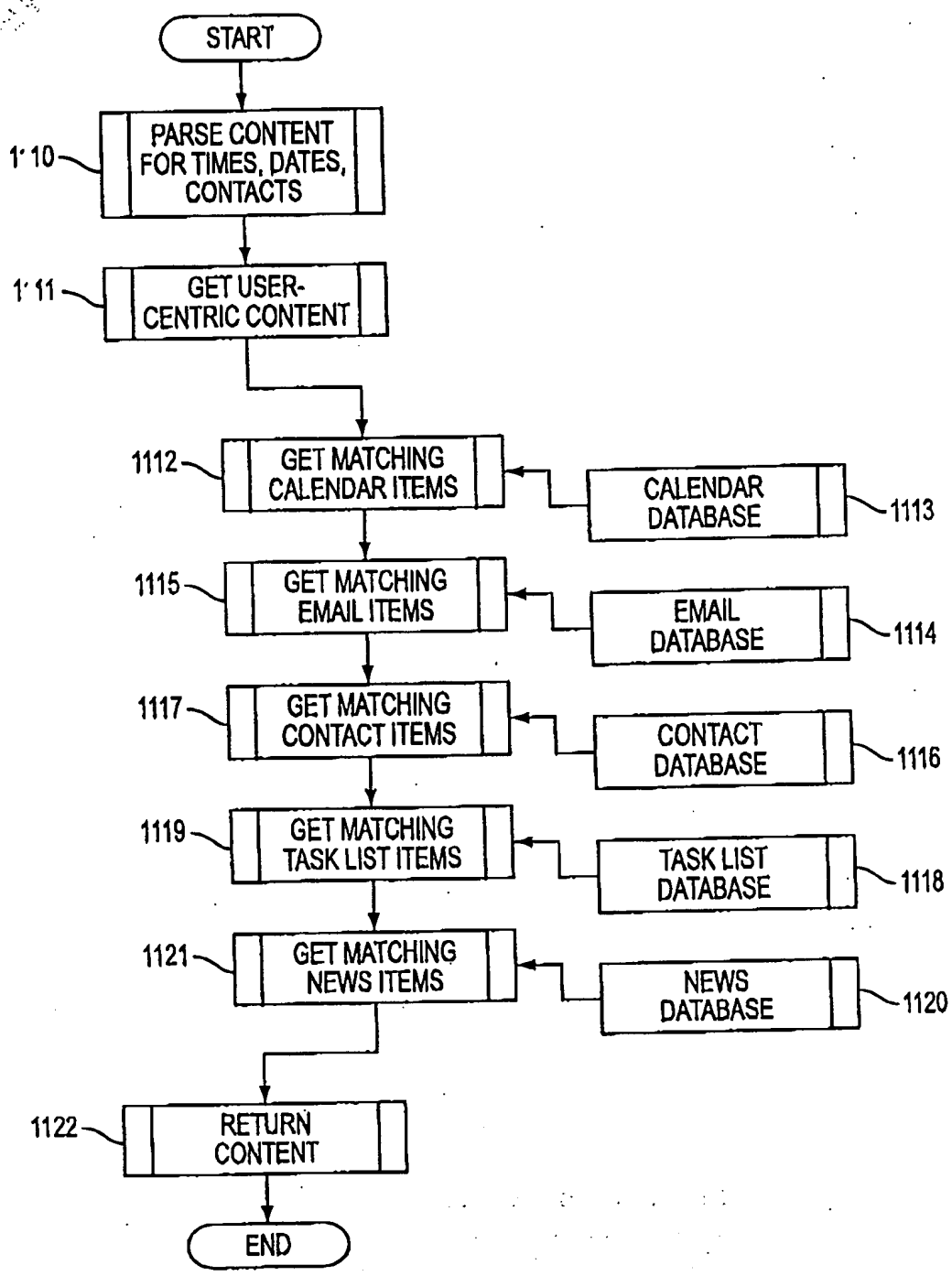
START
PARSE CONTENT FOR TIMES, DATES, CONTACTS
1110
GET USER-CENTRIC CONTENT
1111
GET MATCHING CALENDAR ITEMS
1112
CALENDAR DATABASE
1113
GET MATCHING EMAIL ITEMS
1115
EMAIL DATABASE
1114
GET MATCHING CONTACT ITEMS
1117
CONTACT DATABASE
1116
GET MATCHING TASK LIST ITEMS
1119
TASK LIST DATABASE
1118
GET MATCHING NEWS ITEMS
1121
NEWS DATABASE
1120
RETURN CONTENT
1122
END

FIG. 11

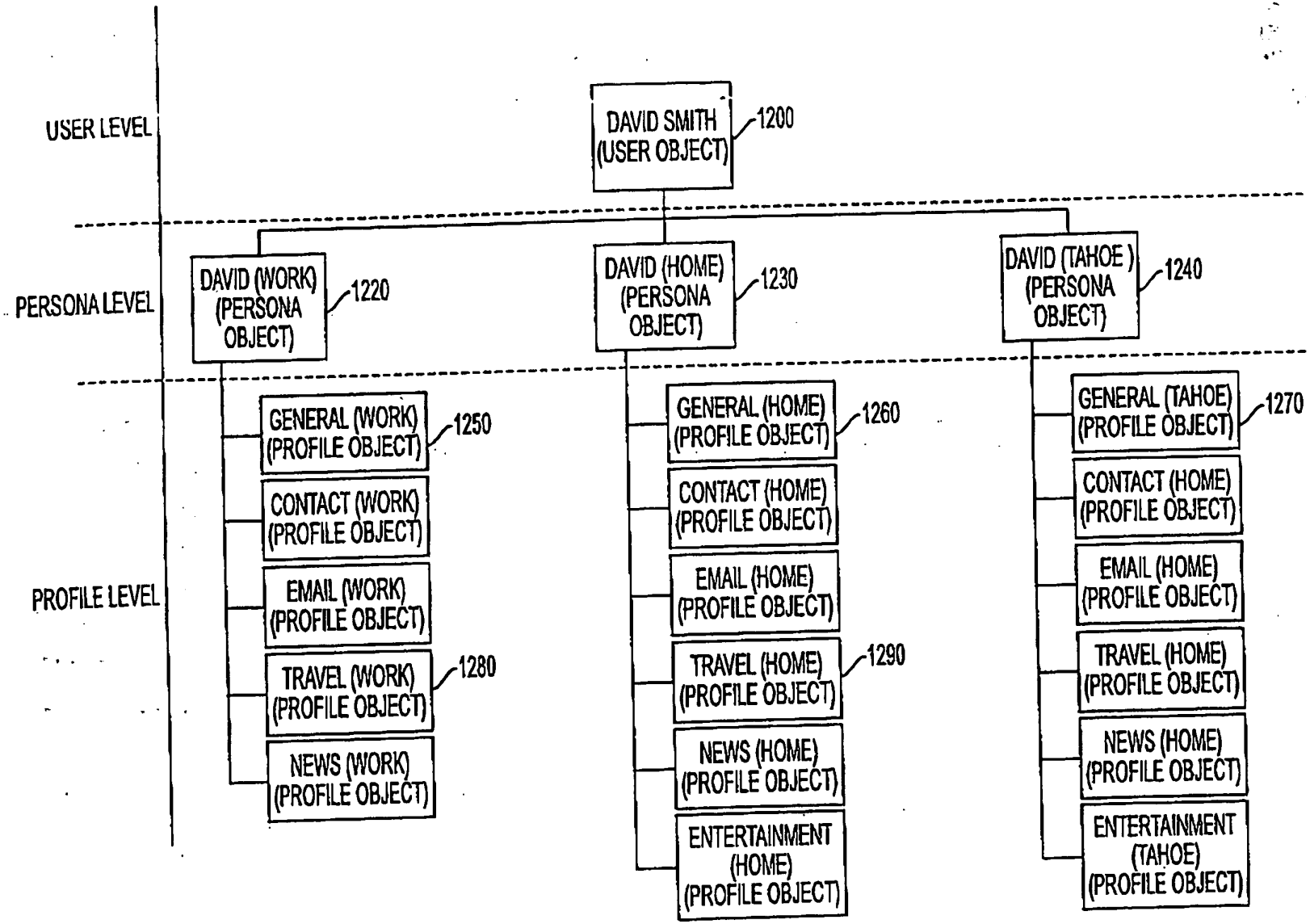
USER LEVEL
PERSONA LEVEL
PROFILE LEVEL
DAVID SMITH (USER OBJECT)
1200
DAVID (WORK) (PERSONA OBJECT)
1220
DAVID (HOME) (PERSONA OBJECT)
1230
DAVID (TAHOE) (PERSONA OBJECT)
1240
GENERAL (WORK) (PROFILE OBJECT)
1250
CONTACT (WORK) (PROFILE OBJECT)
EMAIL (WORK) (PROFILE OBJECT)
TRAVEL (WORK) (PROFILE OBJECT)
1280
NEWS (WORK) (PROFILE OBJECT)
GENERAL (HOME) (PROFILE OBJECT)
1260
CONTACT (HOME) (PROFILE OBJECT)
EMAIL (HOME) (PROFILE OBJECT)
TRAVEL (HOME) (PROFILE OBJECT)
1290
NEWS (HOME) (PROFILE OBJECT)
ENTERTAINMENT (HOME) (PROFILE OBJECT)
GENERAL (TAHOE) (PROFILE OBJECT)
1270
CONTACT (HOME) (PROFILE OBJECT)
EMAIL (HOME) (PROFILE OBJECT)
TRAVEL (HOME) (PROFILE OBJECT)
NEWS (HOME) (PROFILE OBJECT)
ENTERTAINMENT (TAHOE) (PROFILE OBJECT)

FIG. 12

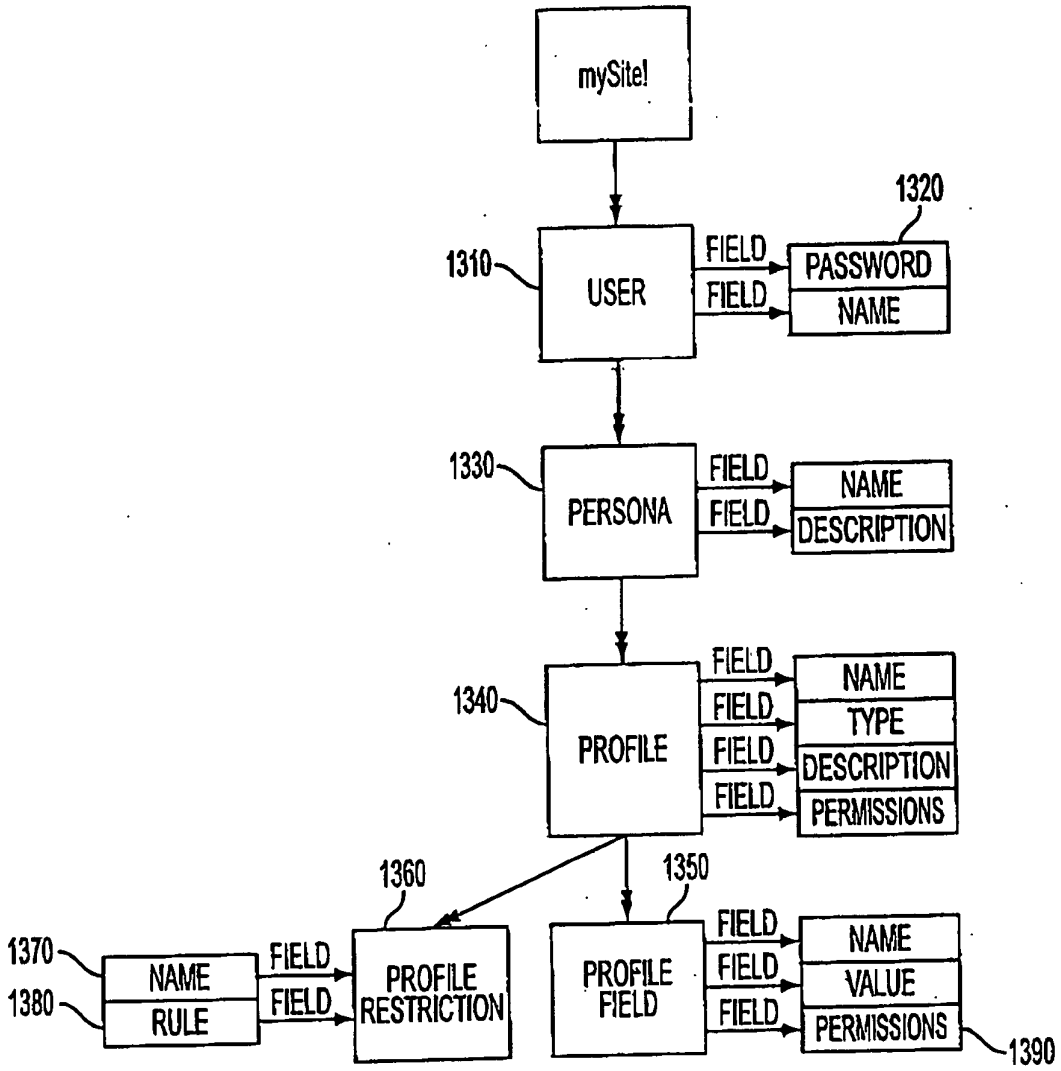
mySite!
1320
1310
USER
FIELD
FIELD
PASSWORD
NAME
1330
PERSONA
FIELD
FIELD
NAME
DESCRIPTION
1340
PROFILE
FIELD
FIELD
FIELD
FIELD
NAME
TYPE
DESCRIPTION
PERMISSIONS
1360
1350
1370
1380
NAME
RULE
FIELD
FIELD
PROFILE RESTRICTION
PROFILE FIELD
FIELD
FIELD
FIELD
NAME
VALUE
PERMISSIONS
1390

FIG. 13

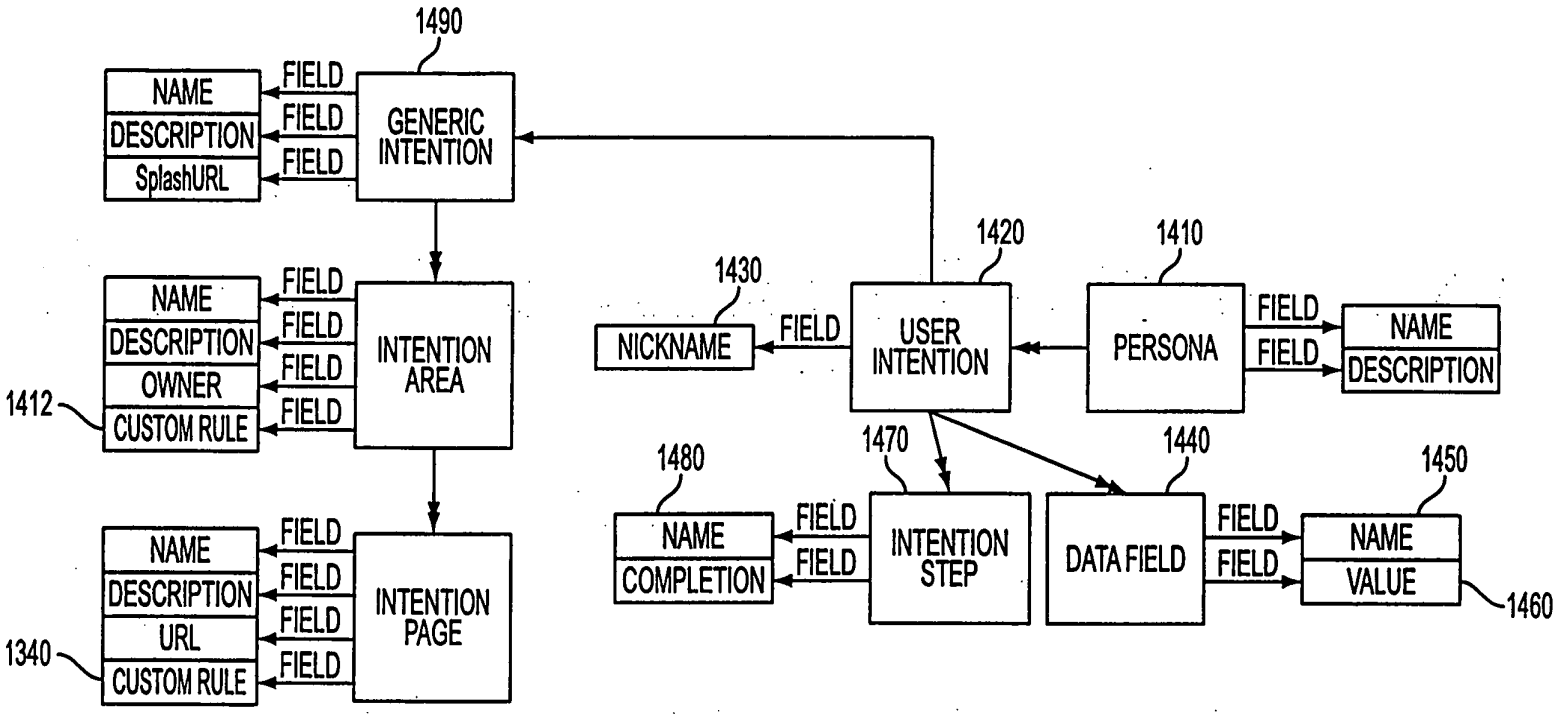
1490
NAME
DESCRIPTION
SplashURL
FIELD
FIELD
FIELD
GENERIC INTENTION
NAME
DESCRIPTION
OWNER
CUSTOM RULE
1412
FIELD
FIELD
FIELD
FIELD
INTENTION AREA
NAME
DESCRIPTION
URL
CUSTOM RULE
1340
FIELD
FIELD
FIELD
FIELD
INTENTION PAGE
1420
1410
1430
NICKNAME
FIELD
USER INTENTION
PERSONA
FIELD
FIELD
NAME
DESCRIPTION
1470
1440
1480
1450
NAME
COMPLETION
FIELD
FIELD
INTENTION STEP
DATA FIELD
FIELD
FIELD
NAME
VALUE
1460

FIG. 14

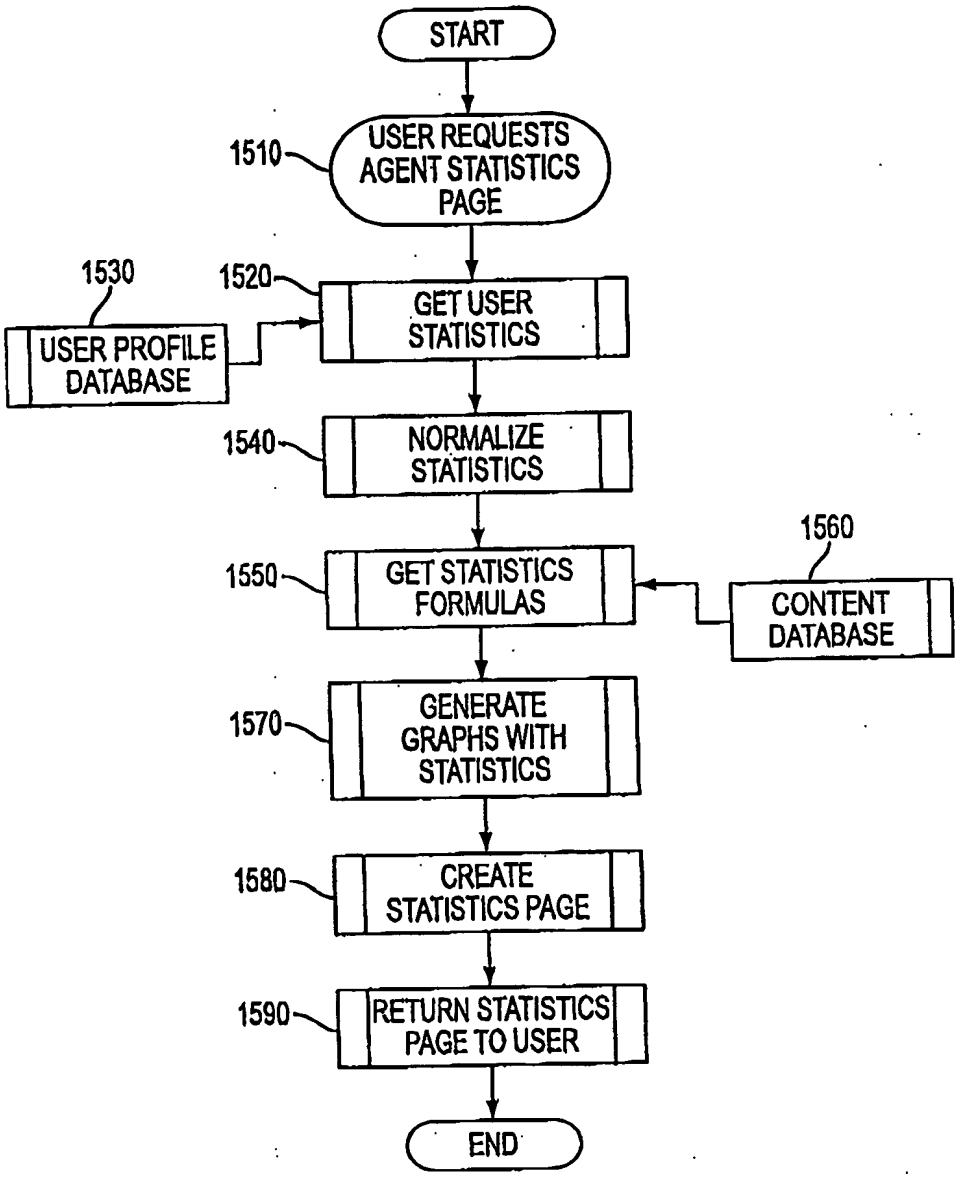
START
1510
USER REQUESTS AGENT STATISTICS PAGE
1530
1520
USER PROFILE DATABASE
GET USER STATISTICS
1540
NORMALIZE STATISTICS
1560
1550
GET STATISTICS FORMULAS
CONTENT DATABASE
1570
GENERATE GRAPHS WITH STATISTICS
1580
CREATE STATISTICS PAGE
1590
RETURN STATISTICS PAGE TO USER
END

FIG. 15

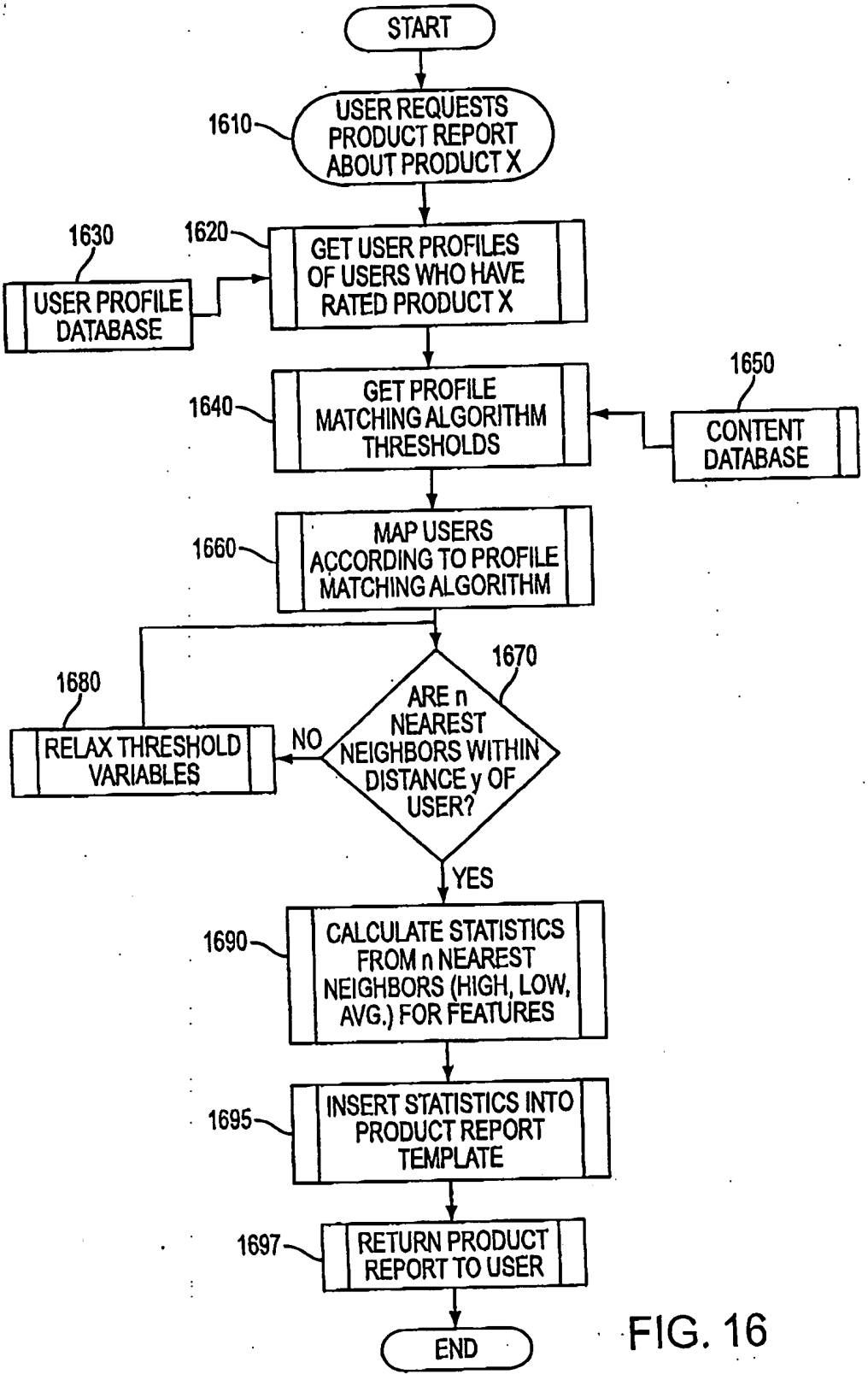
START
1610
USER REQUESTS PRODUCT REPORT ABOUT PRODUCT X
1630
1620
USER PROFILE DATABASE
GET USER PROFILES OF USERS WHO HAVE RATED PRODUCT X
1650
1640
GET PROFILE MATCHING ALGORITHM THRESHOLDS
CONTENT DATABASE
1660
MAP USERS ACCORDING TO PROFILE MATCHING ALGORITHM
1670
1680
ARE n NEAREST NEIGHBORS WITHIN DISTANCE y OF USER?
NO
RELAX THRESHOLD VARIABLES
YES
1690
CALCULATE STATISTICS FROM n NEAREST NEIGHBORS (HIGH, LOW, AVG.) FOR FEATURES
1695
INSERT STATISTICS INTO PRODUCT REPORT TEMPLATE
1697
RETURN PRODUCT REPORT TO USER
END

FIG. 16

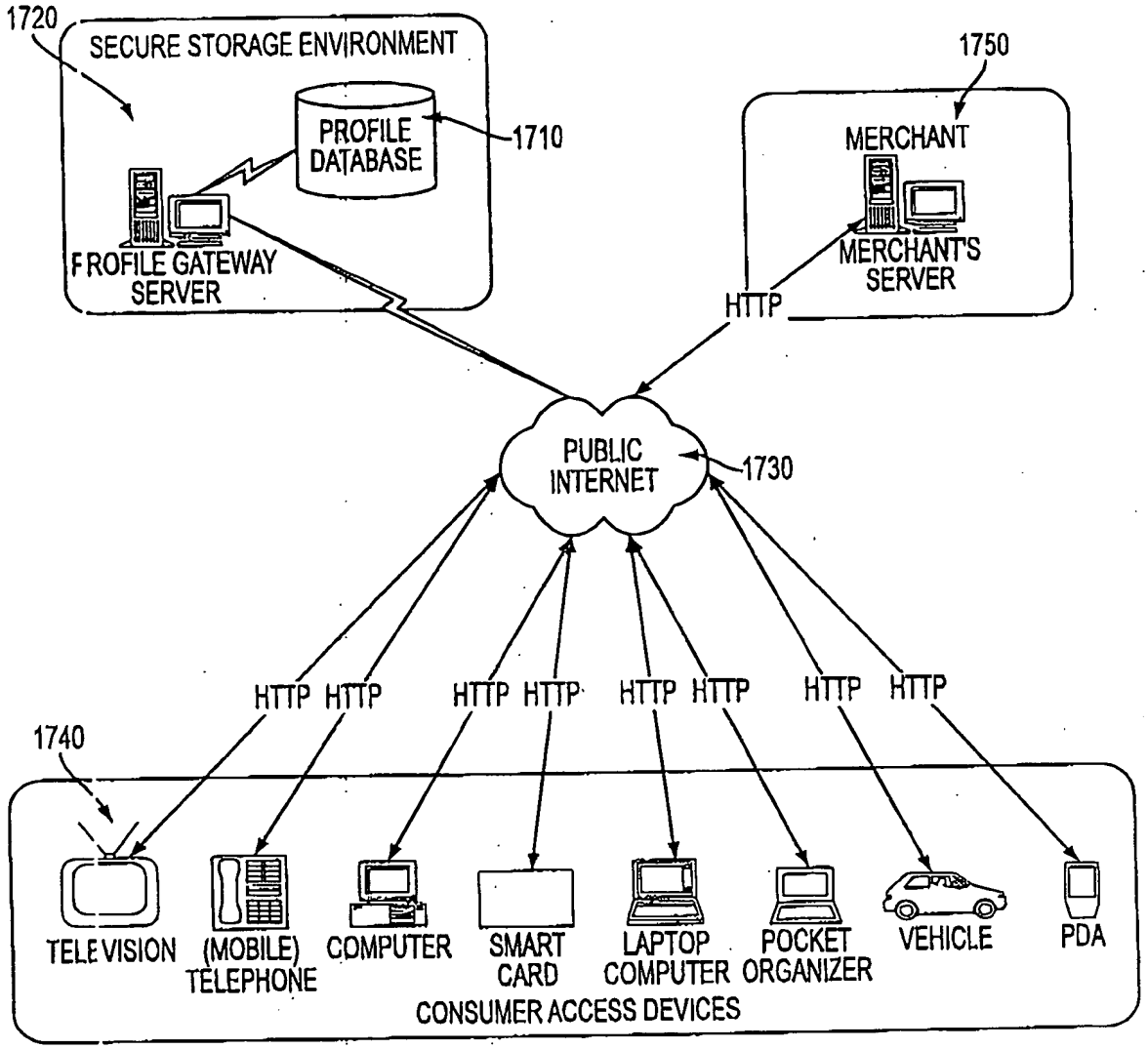
1720
SECURE STORAGE ENVIRONMENT
PROFILE DATABASE
1710
PROFILE GATEWAY SERVER
1750
MERCHANT
MERCHANT'S SERVER
HTTP
PUBLIC INTERNET
1730
HTTP HTTP
HTTP HTTP
HTTP HTTP
HTTP HTTP
1740
TELEVISION
(MOBILE) TELEPHONE
COMPUTER
SMART CARD
LAPTOP COMPUTER
POCKET ORGANIZER
VEHICLE
PDA
CONSUMER ACCESS DEVICES

FIG. 17

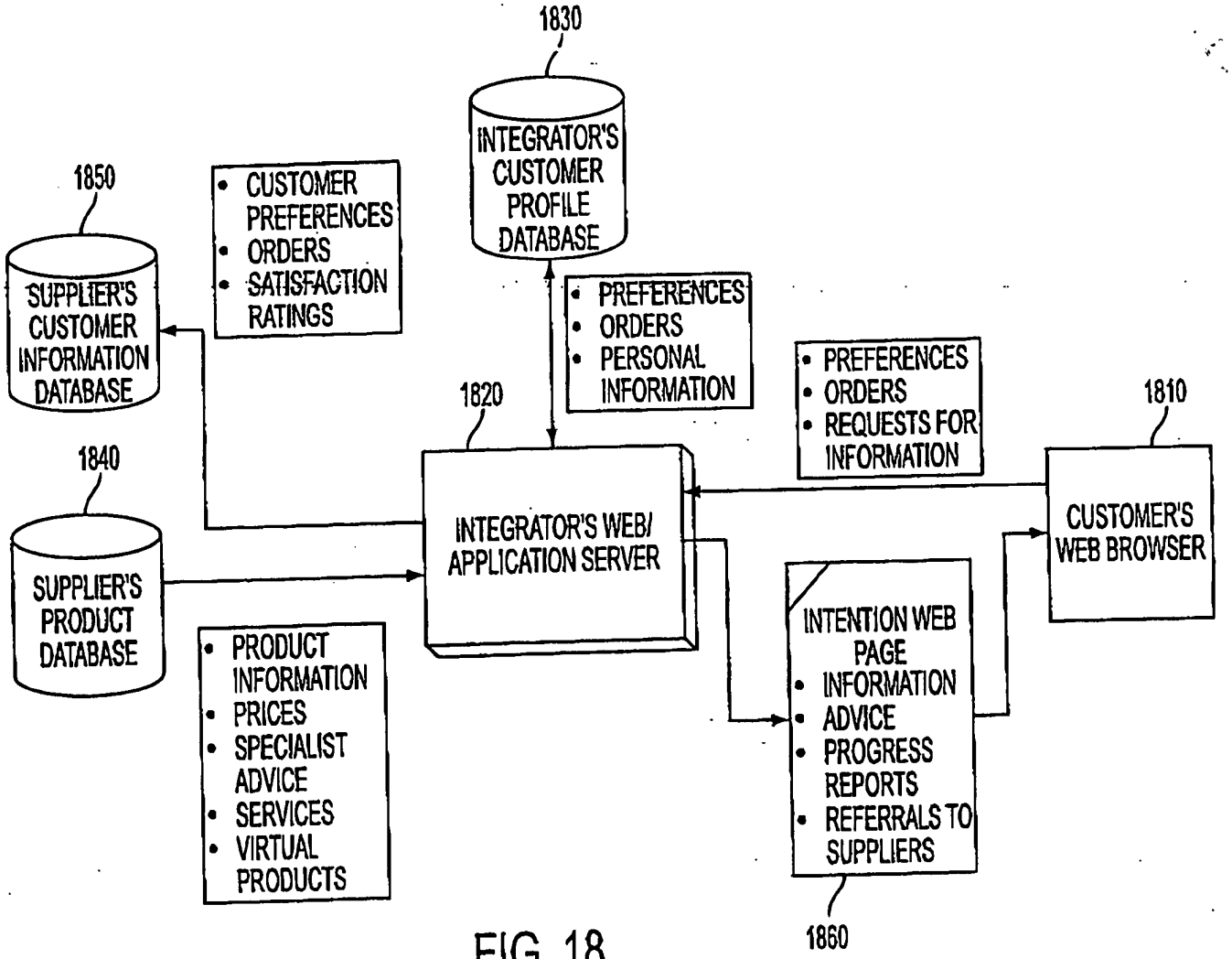
1830
INTEGRATOR'S CUSTOMER PROFILE DATABASE
1850
SUPPLIER'S CUSTOMER INFORMATION DATABASE
• CUSTOMER PREFERENCES
• ORDERS
• SATISFACTION RATINGS
• PREFERENCES
• ORDERS
• PERSONAL INFORMATION
• PREFERENCES
• ORDERS
• REQUESTS FOR INFORMATION
1820
1810
1840
SUPPLIER'S PRODUCT DATABASE
INTEGRATOR'S WEB/ APPLICATION SERVER
CUSTOMER'S WEB BROWSER
INTENTION WEB PAGE
• INFORMATION
• ADVICE
• PROGRESS REPORTS
• REFERRALS TO SUPPLIERS
• PRODUCT INFORMATION
• PRICES
• SPECIALIST ADVICE
• SERVICES
• VIRTUAL PRODUCTS
1860

FIG. 18

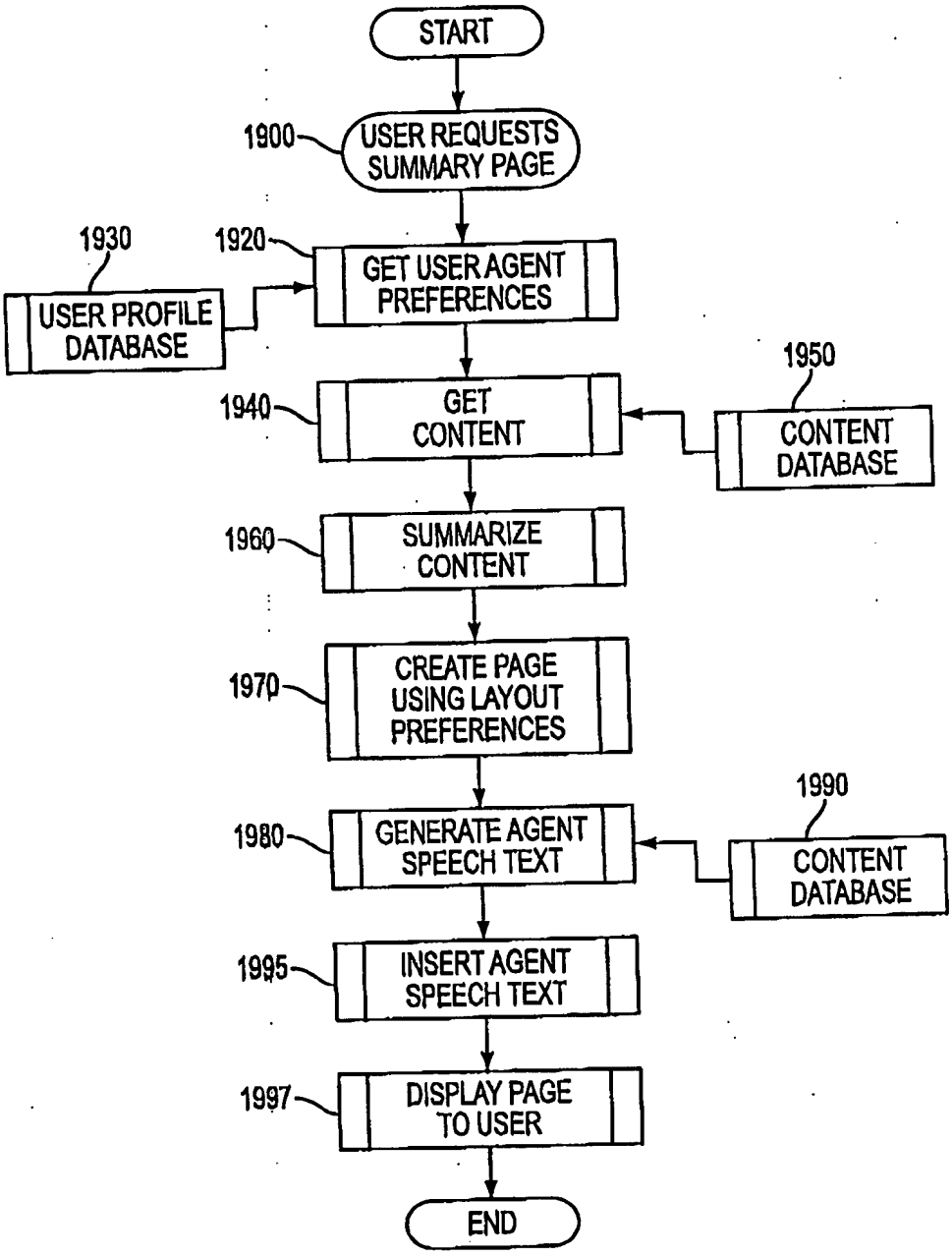
START
1900
USER REQUESTS SUMMARY PAGE
1930
1920
USER PROFILE DATABASE
GET USER AGENT PREFERENCES
1950
1940
GET CONTENT
CONTENT DATABASE
1960
SUMMARIZE CONTENT
1970
CREATE PAGE USING LAYOUT PREFERENCES
1990
1980
GENERATE AGENT SPEECH TEXT
CONTENT DATABASE
1995
INSERT AGENT SPEECH TEXT
1997
DISPLAY PAGE TO USER
END

FIG. 19

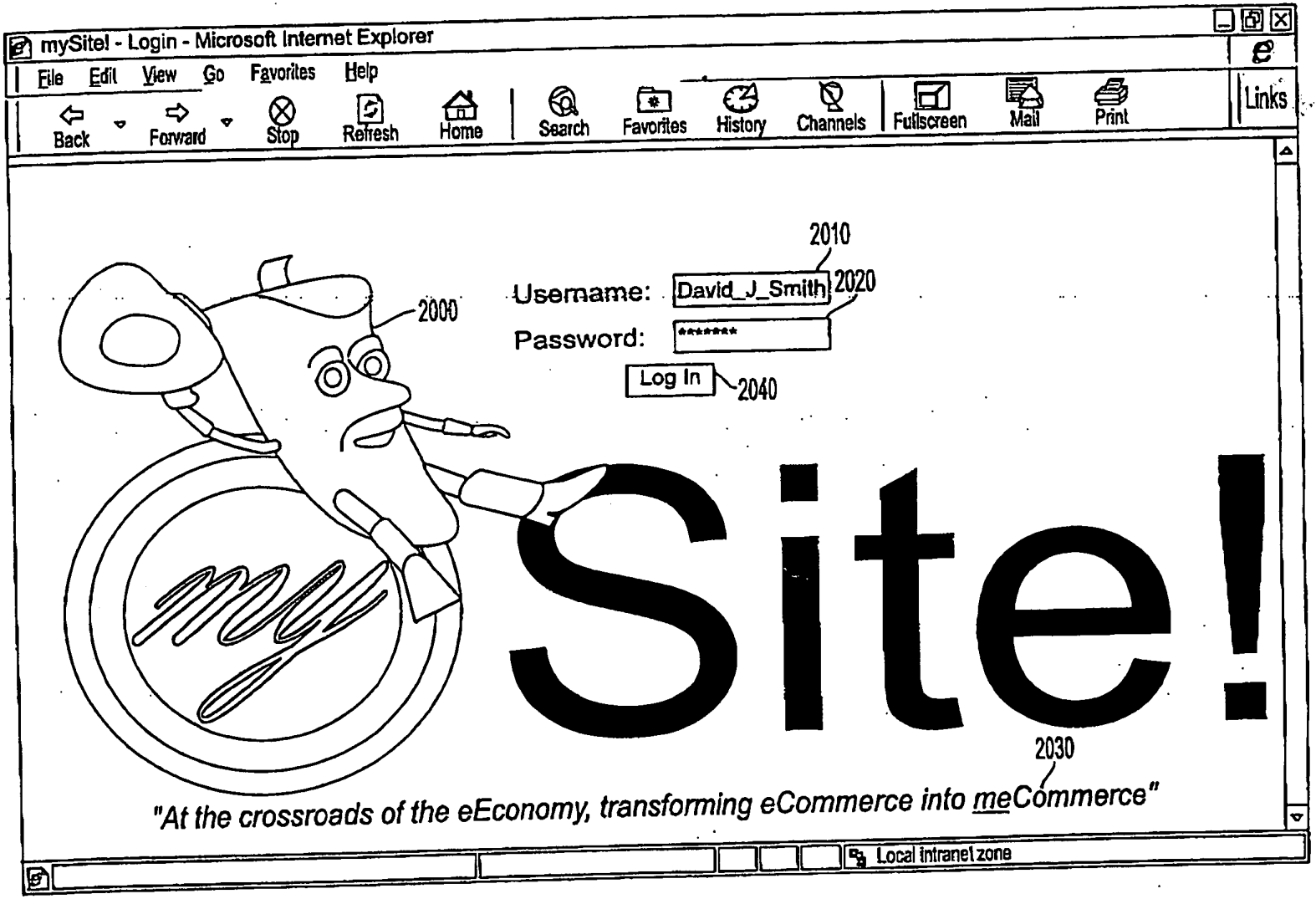
mySite! - Login - Microsoft Internet Explorer
File Edit View Go Favorites Help
Back Forward Stop Refresh Home Search Favorites History Channels Fullscreen Mail Print Links
2010
Username: David_J_Smith 2020
Password: *******
Log In 2040
2000
Site!
2030
"At the crossroads of the eEconomy, transforming eCommerce into meCommerce"
Local intranet zone

FIG. 20

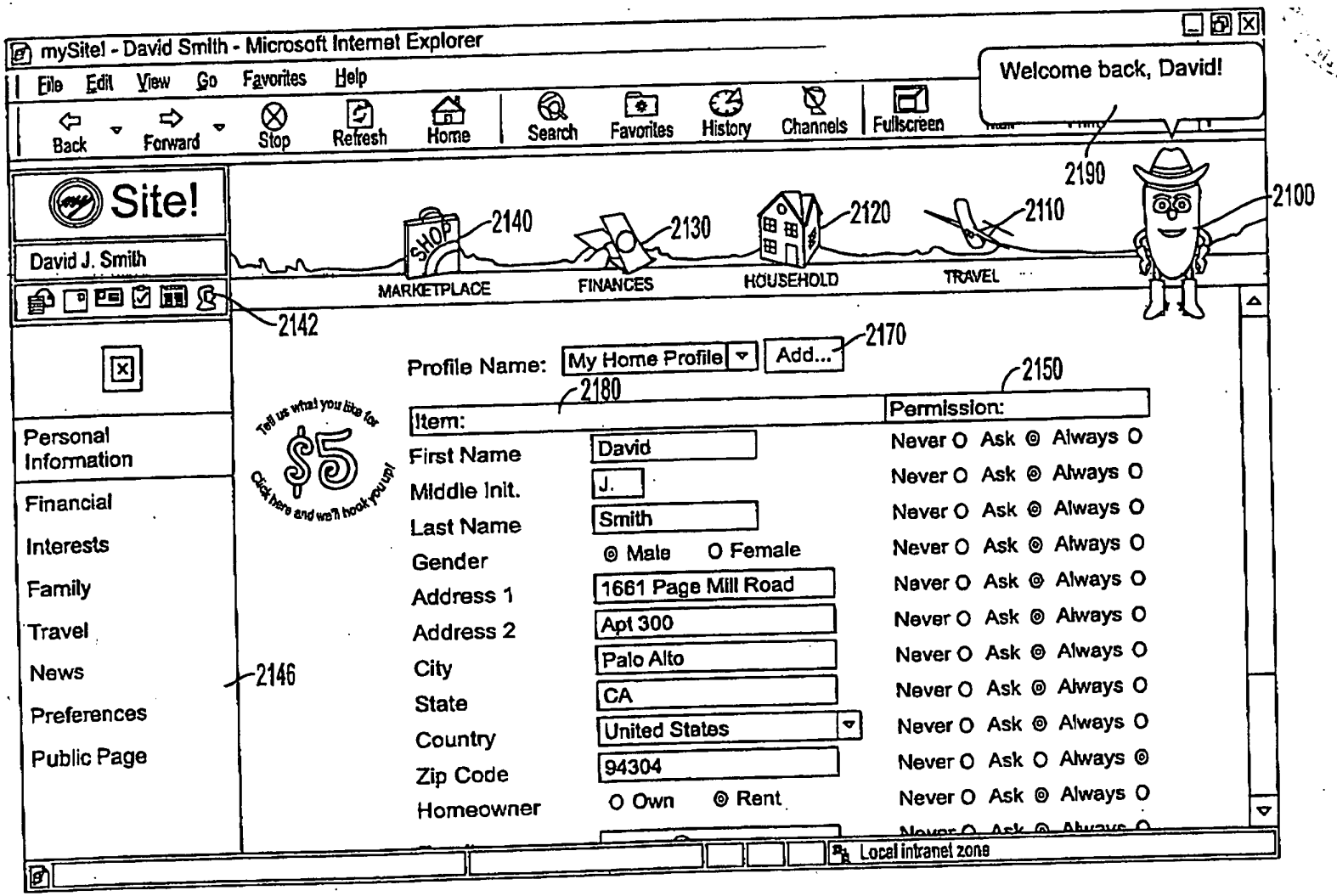
mySite! - David Smith - Microsoft Internet Explorer
File Edit View Go Favorites Help
Back Forward Stop Refresh Home Search Favorites History Channels Fullscreen
Welcome back, David!
2190
2100
Site!
David J. Smith
2140
2130
2120
2110
MARKETPLACE
FINANCES
HOUSEHOLD
TRAVEL
2142
Profile Name: My Home Profile
Add...
2170
2150
2180
Item:
Permission:
Personal Information
Financial
Interests
Family
Travel
News
Preferences
Public Page
2146
First Name David
Middle Init. J.
Last Name Smith
Gender Male Female
Address 1 1661 Page Mill Road
Address 2 Apt 300
City Palo Alto
State CA
Country United States
Zip Code 94304
Homeowner Own Rent
Never Ask Always
Local intranet zone

FIG. 21

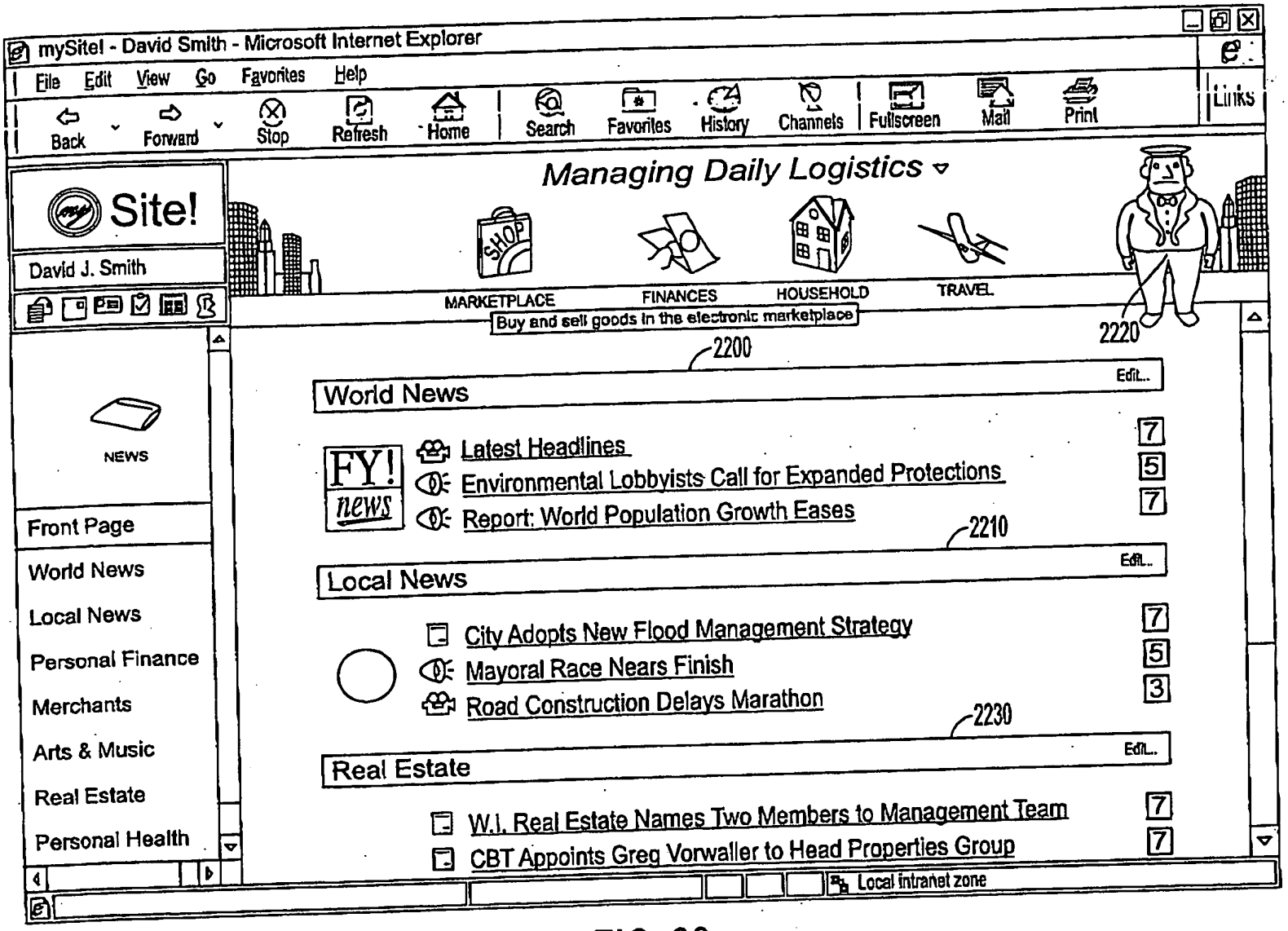
mySite! - David Smith - Microsoft Internet Explorer
File Edit View Go Favorites Help
Back Forward Stop Refresh Home Search Favorites History Channels Fullscreen Mail Print Links
Site!
David J. Smith
Managing Daily Logistics
MARKETPLACE
FINANCES
HOUSEHOLD
TRAVEL
Buy and sell goods in the electronic marketplace
2220
2200
NEWS
Front Page
World News
Local News
Personal Finance
Merchants
Arts & Music
Real Estate
Personal Health
World News
Edit...
FY! news
Latest Headlines
Environmental Lobbyists Call for Expanded Protections
Report: World Population Growth Eases
2210
Local News
City Adopts New Flood Management Strategy
Mayoral Race Nears Finish
Road Construction Delays Marathon
2230
Real Estate
W.I. Real Estate Names Two Members to Management Team
CBT Appoints Greg Vorwaller to Head Properties Group
Local intranet zone

FIG. 22

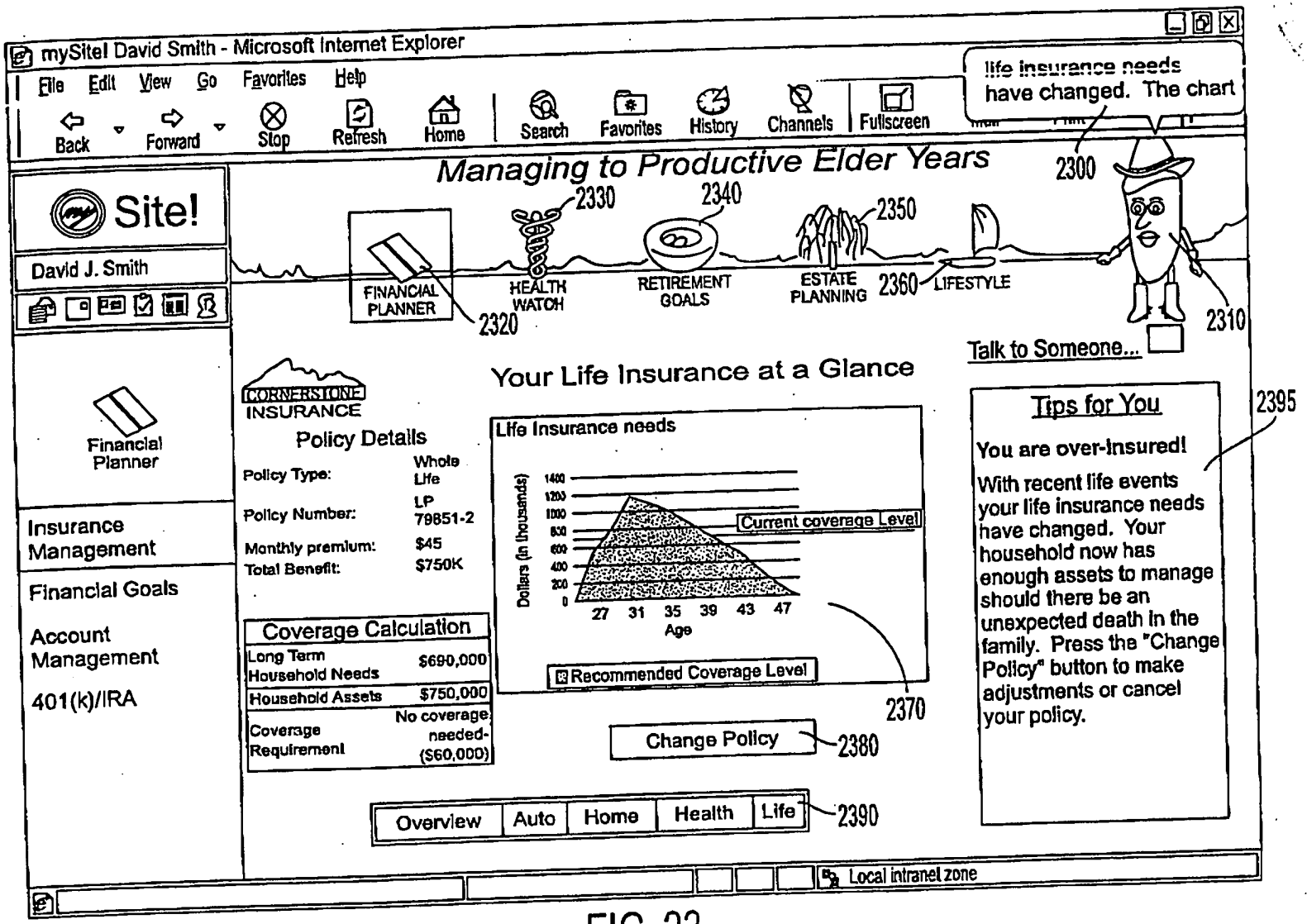
mySite! David Smith - Microsoft Internet Explorer
File Edit View Go Favorites Help
Back Forward Stop Refresh Home Search Favorites History Channels Fullscreen
life insurance needs have changed. The chart
Managing to Productive Elder Years
2300
2330
2340
2350
2360
FINANCIAL PLANNER
HEALTH WATCH
RETIREMENT GOALS
ESTATE PLANNING
LIFESTYLE
2320
2310
Site!
David J. Smith
Financial Planner
Insurance Management
Financial Goals
Account Management
401(k)/IRA
Talk to Someone...
Your Life Insurance at a Glance
CORNERSTONE INSURANCE
Policy Details
Policy Type: Whole Life
Policy Number: LP 79851-2
Monthly premium: $45
Total Benefit: $750K
Life Insurance needs
Dollars (in thousands)
1400
1200
1000
800
600
400
200
0
27 31 35 39 43 47
Age
Current coverage Level
Recommended Coverage Level
2370
Coverage Calculation
Long Term Household Needs $690,000
Household Assets $750,000
Coverage Requirement No coverage needed-($60,000)
Change Policy
2380
Tips for You
2395
You are over-insured!
With recent life events your life insurance needs have changed. Your household now has enough assets to manage should there be an unexpected death in the family. Press the "Change Policy" button to make adjustments or cancel your policy.
Overview Auto Home Health Life
2390
Local intranet zone

FIG. 23

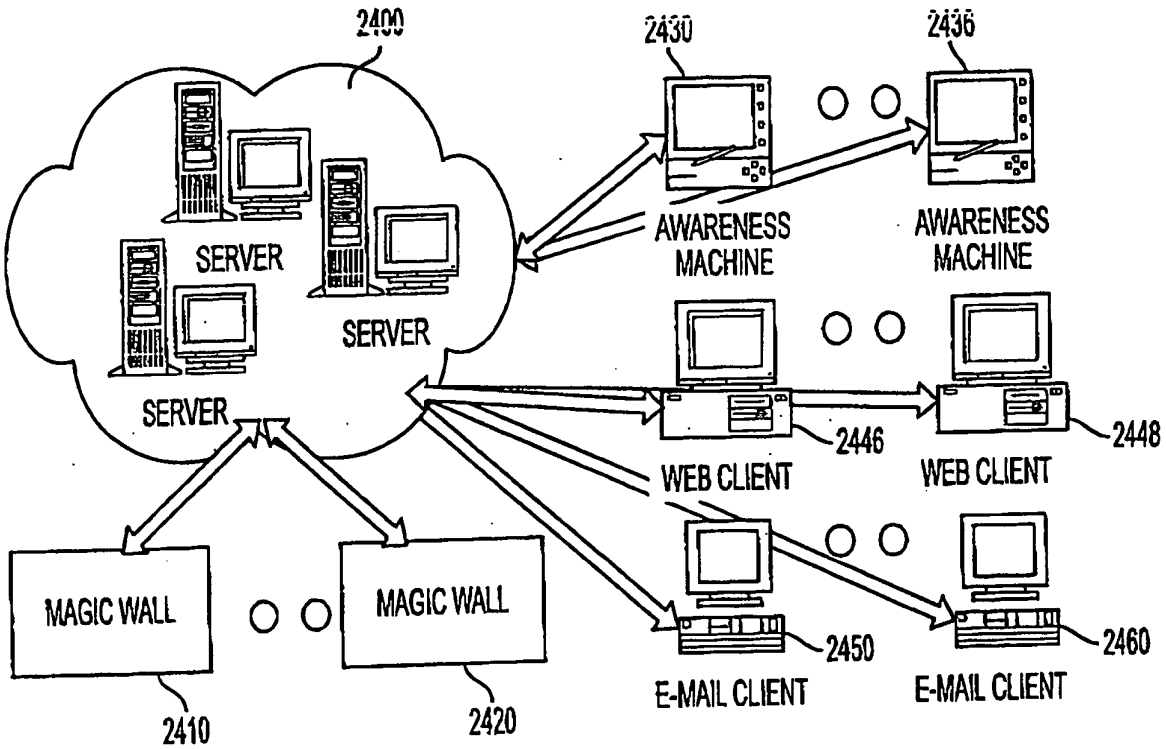
2400
2430
2436
SERVER
SERVER
SERVER
AWARENESS MACHINE
AWARENESS MACHINE
2446
2448
WEB CLIENT
WEB CLIENT
MAGIC WALL
MAGIC WALL
2450
2460
E-MAIL CLIENT
E-MAIL CLIENT
2410
2420

FIG. 24

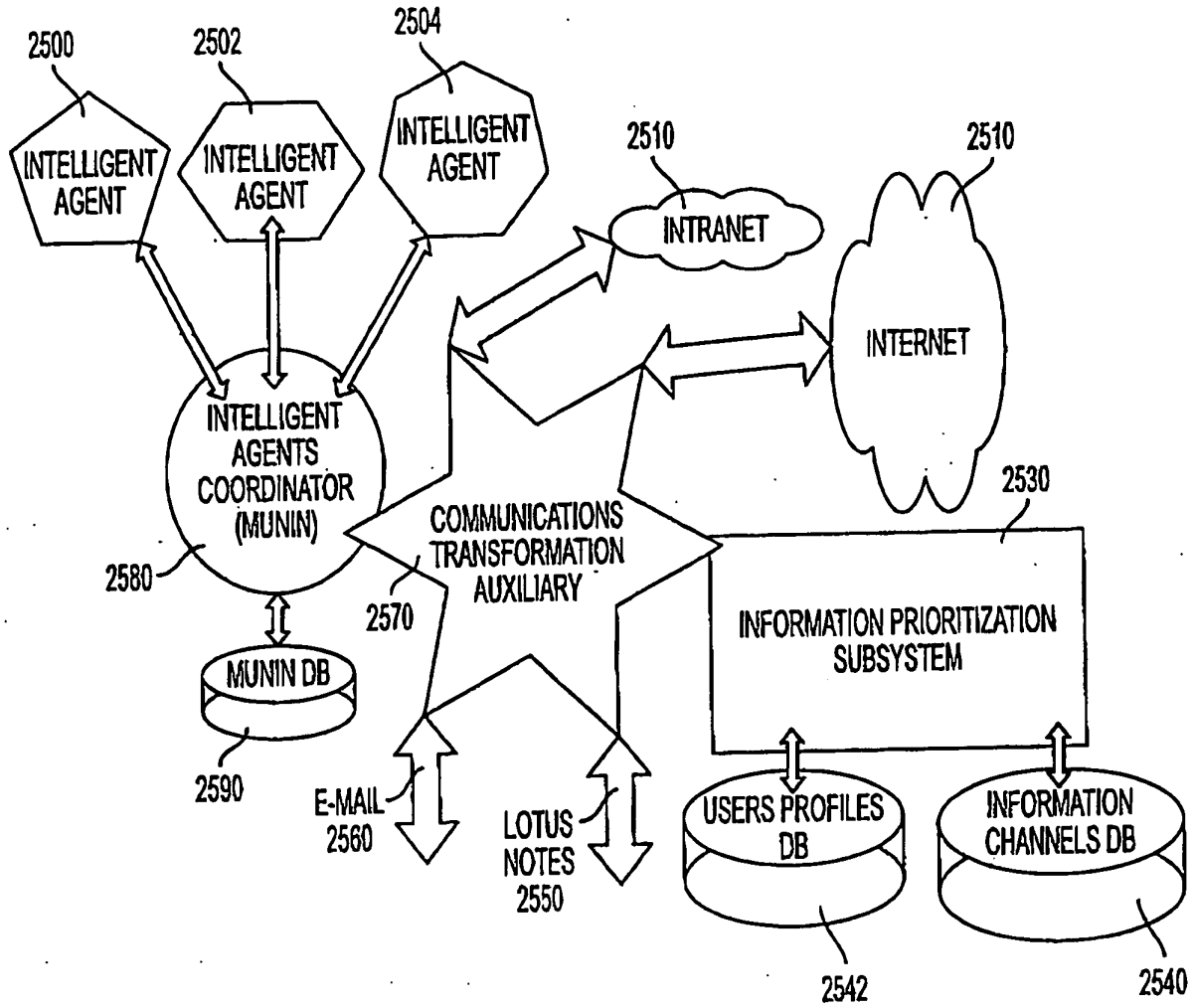
2500
2502
2504
INTELLIGENT AGENT
INTELLIGENT AGENT
INTELLIGENT AGENT
2510
INTRANET
2510
INTERNET
INTELLIGENT AGENTS COORDINATOR (MUNIN)
2580
COMMUNICATIONS TRANSFORMATION AUXILIARY
2570
2530
INFORMATION PRIORITIZATION SUBSYSTEM
MUNIN DB
2590
E-MAIL 2560
LOTUS NOTES 2550
USERS PROFILES DB
INFORMATION CHANNELS DB
2542
2540

FIG. 25

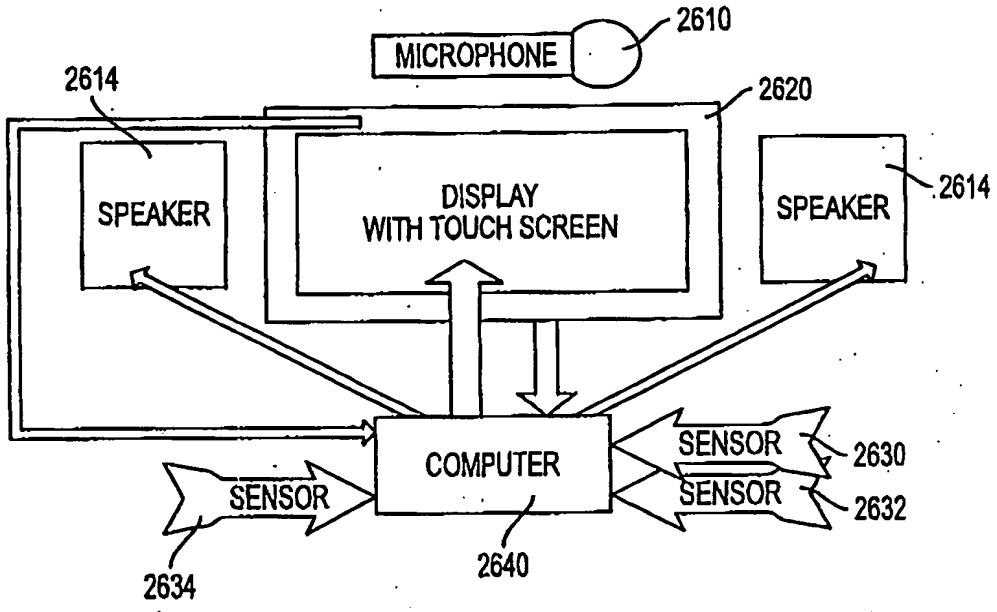
MICROPHONE
2610
2614
2620
SPEAKER
DISPLAY
WITH TOUCH SCREEN
SPEAKER
2614
COMPUTER
SENSOR
2630
SENSOR
2632
SENSOR
2634
2640

FIG. 26